

THE MALACOLOGICAL WORKS AND TAXA OF SYLVANUS HANLEY (1819–1899)

Eugene V. Coan^{1*} & Alan R. Kabat²

ABSTRACT

The malacological works of Sylvanus Hanley (and his relative Charles Thorpe) are discussed and their dates in some cases clarified. The taxa that first appear in these works are listed, their type specimens noted when known, and the current status of the available taxa discussed. Of the 375 species-group names that first appear in these works, 367 are available, and 8 are *nomina nuda*. Of the 367 available species-group taxa, approximately 219 are now considered valid. Approximately 60% of the available species are represented by type material, mainly in the Natural History Museum in London and in the Leeds City Museum in Leeds, U.K. Hanley also described several genus-group and family-group names, some of which are still considered valid.

Key words: Sylvanus Hanley, Charles Thorpe, bibliography, taxonomy.

INTRODUCTION

A decade ago, Norris & Dance (2002) authored a biography of Sylvanus Hanley, a significant British malacologist who published from the 1840s to the 1880s. He was particularly noted for his contributions on the Bivalvia and on the non-marine fauna of India and adjacent regions. In a review of that paper (Coan & Kabat, 2002), we noted that this otherwise excellent biography also included a bibliography of Hanley's papers and books that had some dating errors, as did its list of Hanley's species, which omitted a number of taxa.

In 2002, we intended to prepare an improved bibliography and a more complete, analytical list of Hanley's taxa and type material. However, the press of other projects and the difficulty of access to some scarce literature postponed that project. Now that almost all of Hanley's works and more of the relevant secondary literature are available online, primarily in the Biodiversity Heritage Library, we have returned to that project, resulting in the present paper.

MATERIALS AND METHODS

† We reviewed all of Hanley's publications, indexed the new taxa, and reviewed the secondary literature to identify subsequent references

to Hanley's publications and taxa. To ensure that our coverage of Hanley's taxa was as thorough as possible, we reviewed all the taxa attributed to him or to Charles Thorpe in the online, searchable versions of Sherborn (1922–1933), Neave et al. (1939–1996) and Ruhoff (1980). One of us (Kabat) spent one week at the Natural History Museum of the United Kingdom (London) (25–29 June 2012) and two days at the Leeds City Museum (2–3 July 2012), reviewing Hanley type specimens, both those already catalogued as types and those hitherto unrecognized in the general collection. The Hanley type material in London has been frequently studied by the curatorial staff and outside researchers over the past five decades. In contrast, the Hanley type material in Leeds has been only partially curated and remains largely overlooked by outside researchers.

The measurements of type specimens, when given herein, were made with digital (electronic) calipers. The measurements of gastropods are height (parallel to the shell axis) and width (perpendicular to the shell axis, at the widest part of the aperture), except for the one low-spired *Haliotis*, for which the length and width are given. The measurements of bivalves are length (parallel to the hinge line) and height (perpendicular to the length and running through the uppermost point of the hinge line). For most bivalves, the length corresponds to

¹Research Associate, Santa Barbara Museum of Natural History, 2559 Puesta del Sol Road, Santa Barbara, California 93105-2936, U.S.A.

²Research Associate, Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, Massachusetts 02138, U.S.A.

*Corresponding author: genecoan@gmail.com

the maximum dimension; for some bivalves with trapezoidal shapes or otherwise diagonally elongated valves, the length may be slightly shorter (by 5% to 10%) than the maximum dimension.

Hanley's Life and Malacological Research

Hanley was born in 1819 in Oxford and studied at Oxford University, obtaining a B. A. degree in 1841. He soon inherited sufficient funds from his father, so that he did not have to work for a living, and devoted the rest of his long life (he died at age 80 in Penzance, Cornwall) to the study of mollusks. Adrian Norris has maintained an interest in Hanley and his family, and he intends to publish more on that subject (A. Norris, pers. comm., 15 November 2011).

Hanley was a contemporary of the shell collector Hugh Cuming (1791–1865), and described many species from the Cuming collection, as did his fellow conchologists Lovell Reeve (1814–1865), George Brettingham Sowerby I (1788–1854), and George Brettingham Sowerby II (1812–1884). For many of his new species (other than the Tellinidae, as noted below), Hanley was comparable to Reeve and the Sowerbys when it came to describing new species – all four did not hesitate to describe as new species what are now considered to be morphological or color forms of previously described taxa, because they did not recognize the significance of variation within a species. Hanley also described a number of “varieties” (equivalent to subspecies), most also based on unique specimens and mere color forms. Nor did Hanley and his contemporaries refrain from describing new species based on material from unknown or uncertain localities, or based upon unique specimens. When it came to molluscan genera, they preferred to use the Lamarckian genera in their broadest sense, with all the species in any given family being assigned a single genus.

Hanley's first book, at the age of 21 and while still in college, was the appropriately titled *The young conchologist's book of species* (Hanley, 1840), which had descriptions of some 600 species, three newly described by Hanley, all now synonymized. This book soon went into a second edition (Hanley, 1842a), which included

a glossary and index. Tomlin (1945: 91) briefly discussed these editions. Hanley (1842: 154) stated that the “localities and authorities [in the index] are chiefly extracted from Dr. Jay's *Catalogue*,” referring to the *Catalogue of Recent Shells* by John C. Jay (1808–1891), which went through three editions in the 1830s (for example, Jay, 1836).

Hanley's second book was the “second” (actually third) edition of William Swainson's *Exotic conchology* (Hanley, 1841). Hanley's edition has little scientific value and has only one new taxon, *Cochlycopa*, in the Volutidae. Hanley (1841: 4) explained that: “Mr. Swainson on quitting England [for New Zealand] having left this beautiful work in an unfinished condition, to me has been committed the task of reducing the whole into systematic arrangement, of drawing up descriptions of species, and adding such synonyms as ... require[d].” Abbott (1968: xxiv), in reprinting this work, noted that: “An examination of several copies of Hanley's edition indicates that he probably had left-over copies of some of Swainson's 1834 plates. Both Swainson's and Hanley's editions were hand-painted over the lithographed line drawings, so that no two copies were identical.” Concerning Swainson's two editions, see Sherborn & Reynell (1915) and McMillan (1963).

Hanley then focused his attention on the Bivalvia, publishing the first edition (or version) of his *Illustrated, enlarged and English edition of Lamarck's species of shells* (Hanley, 1842–1843), which, despite its title, was limited to the Bivalvia. Evidently not satisfied with this work, in 1843, Hanley reissued it with some additional text and plates, under a slightly revised title, *An illustrated and descriptive catalogue of Recent shells* (Hanley, 1842–1846). Hanley then reissued it yet again in 1856, with further new text and plates, under yet a third title, *An illustrated and descriptive catalogue of Recent bivalve shells* (Hanley, 1842–1856). We discuss the problems in dating these publications in the next section, but they are of great significance in containing the descriptions and illustrations of many new species, as well as re-descriptions of those of earlier authors. It must be emphasized that – in contrast to most of Hanley's illustrated publications, in which the specimens are usually illustrated at life-size – these books on bivalves

FIG. 1. Plate 2 from *An illustrated, enlarged, and English edition of Lamarck's species of shells* (Hanley, 1842–1843). Note that the specimens are all printed at the same size, regardless of their original dimensions. Plates 1–3 of the first edition were not reprinted in the later editions or versions.



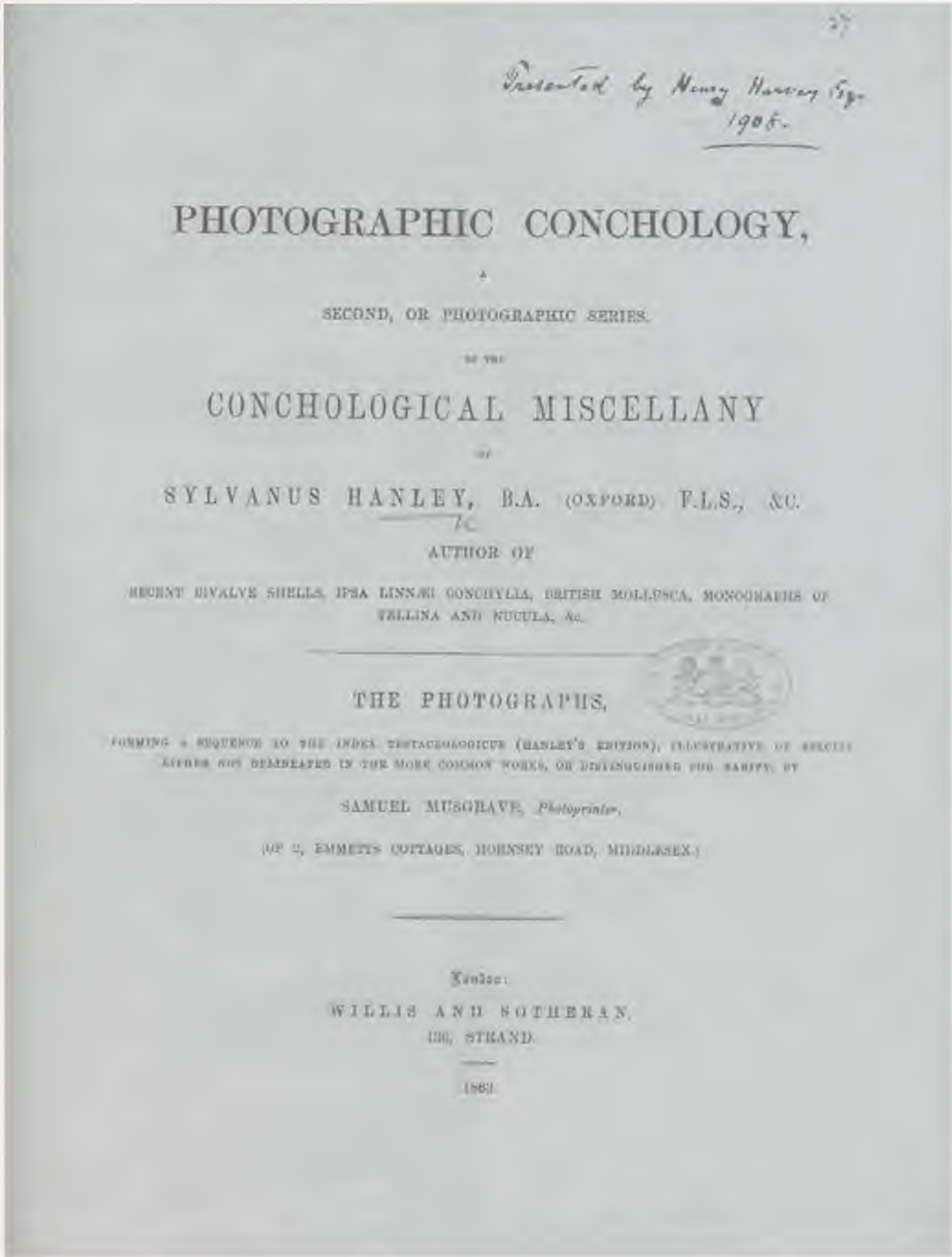


FIG. 2. Title page, *The Photographic Conchology* (Hanley, 1863). The first book to use photography for illustrating mollusks, with all the black-and-white photographs completely overpainted in color. Thus, nothing remains visible of the original photograph except for the outline of the shells.

have all the illustrated specimens enlarged or reduced to approximately the same size. While this makes for neatly ordered plates (Fig. 1), it makes it harder to match potential type specimens with the illustrations. This work, and Hanley's later *Index testaceologicus* (Hanley, 1856b), were assembled in part on the model of the *Index testaceologicus* (1818, 1823–1825, 1828a, b) by William Wood (1774–1857). In contrast to Wood's work, which used symbols to indicate whether a figure was reduced, life-size, or enlarged, Hanley generally did not provide this information on his plates in these works. Hanley's personal copy of this work (Hanley, 1842–1856) is now in the Library archives at the Academy of Natural Sciences of Drexel University (Philadelphia). It contains interleaved blank pages with annotations about generic allocations and specimens in his collection. It also has many additional pages onto which he pasted illustrations of shells from other sources (Callomon, 2010).

Perhaps Hanley's most important book at the time was *A history of British Mollusca, and their shells* (Forbes & Hanley, 1848–1853), published in four volumes, and co-authored with the distinguished marine biologist Edward Forbes (1815–1854). This work is noteworthy for its extensive anatomical descriptions and ecological observations of the included species, which may lead some to conclude that the "biological" component must have been entirely the work of Forbes, for Hanley's other papers contain no information on anatomy or ecology. However, Norris & Dance (2002: 367) suggested that "there is evidence throughout the work that Hanley contributed more than his fair share" and noted that many of the specimens were collected by Hanley "around the English coast," including with a dredge. Charles Darwin was among the numerous researchers who used this reference, as revealed by his correspondence with the paleontologist Charles Lyell (C. Lyell to C. Darwin, 1 May 1856; C. Darwin to C. Lyell, 14 Oct. 1862, online at <http://www.darwinproject.ac.uk>). Darwin also asked the botanist J. D. Hooker whether he had a copy of this "grand work" that Darwin could examine (C. Darwin to J. D. Hooker, 14 Nov. 1857). Darwin, in his monographs on the barnacles, acknowledged Hanley for having provided him with an important reference on barnacles.

Hanley's next book was *The conchological miscellany* (Hanley, 1854–1858). In an afterword at the end of this book, Hanley explained that: "The plates of *Cyclostoma* (together with

those of *Melo*, *Pandora*, and *Amphidesma*) were originally intended to appear in the 'Species Conchyliorum' of the late G. B. Sowerby. He did not, however, publish them, but discontinued his beautiful, yet unremunerative, work, after the first number. Subsequently to his decease, a few imperfect sets were sold by one of the principal London dealers in second-hand books, and issued as the 'Species Conchyliorum part ii'." Petit (2009: 56–58) was unable to locate any copies so titled of this second part, the first part having been published by Sowerby in 1830.

Meanwhile, in the 1840s and early 1850s, Hanley was also studying the specimens in the shell collection of Linnaeus, which had been acquired by the Linnean Society of London through a purchase by James E. Smith (the specimens studied by Linnaeus in the Swedish royal collections remained in Uppsala, Sweden). Hanley's research led to two publications, a book entitled *Ipsa Linnaei conchyliæ* (Hanley, 1855) and an article, "On the Linnean manuscript of the 'Museum Ulricæ'" (Hanley, 1859b). These remain important for their analysis of the molluscan species described by Linnaeus in the *Systema natura* and his other publications. Hanley made good use of the manuscripts of Daniel Solander (1733–1782) in analyzing the Linnaean species (Wilkins, 1955: 86–87). Unfortunately, Hanley apparently had a careless attitude towards the curation of the Linnaean collections in London; Norris & Dance (2002: 368) concluded that his curatorial efforts were so abysmal, mixing old and new specimens, that "it were better had he not started it," although part of the blame may fall on subsequent curators of that collection prior to the 1950s.

Hanley then published a revised edition of Wood's *Index testaceologicus* (Hanley, 1856b). Norris & Dance (2002: 367) commended this work for its comprehensiveness and numerous illustrations, which they recognized was the product of "someone with an encyclopaedic knowledge of molluscan shells and their classification." Coan & Petit (2011: 15) and Wilkins (1957: 157–158) further discussed this work.

Hanley's next book was the curiously published *Photographic conchology* (Hanley, 1863b), stated to be the "second, or photographic series" of the aforementioned *Conchological miscellany* (Fig. 2). The reader may be confused in examining this work, for all the illustrations are in vivid, almost garish color, yet color photography did not exist until

the 1940s. Hanley had black-and-white photographs of freshwater bivalves of the genera *Anodonta* and *Unio* (Unionidae) and *Cyrena* (Cyrenidae) completely over-painted in color, leaving no trace of the original black-and-white photographs. Norris & Dance (2002: 382, fig. 7) reprinted one of the plates, in color. Smith (1909: 196) noted that the "coloration [was] not always successful;" and the "method of production by photography secured correctness of outline, but the surface ornamentation is much obscured owing to reduction and the superimposed colour and gum-wash." In the 1850s and 1860s, this coloring of photographs was a popular technique (Henisch & Henisch, 1994), but Hanley never repeated the method. That said, this work does have the description of one new species, *Unio tirostris*, and the first illustrations of two previously described species of *Cyrena*. Some sources (Corns & Sparke, 1915: 102, 163) erroneously attributed authorship of this work to Samuel Musgrave, but he was the photographer, not the author of the text. Oddly, despite having published the first molluscan work based on photography, no image of Sylvanus Hanley is known.

Hanley's last malacological book was the *Conchologia Indica* (Hanley & Theobald, 1870–1876), co-authored with William Theobald (1829–1908). This book covered some of the non-marine molluscs of British India, including what is now Burma, Nepal, Pakistan, and Sri Lanka, with a few estuarine or brackish-water species included. Hanley never visited India, and the specimens in the book are largely those collected by Theobald and by William Henry Benson (1803–1870), both of whom did extensive collecting. Unfortunately, Hanley's careless attitude towards curation did much to ruin the scientific value of the collections of Benson and Theobald, who had carefully labeled their specimens with precise locality information. Norris & Dance (2002: 368) sadly noted that "Hanley acquired Benson's collections and manuscripts, replaced the original labels with ones of his own which merely read 'India,' and as if that were not enough, he lost Benson's precious manuscripts!" Naggs (1997: 56) forthrightly discussed Hanley's "unspeakable destruction of Benson's documentation" and quoted from a 1922 letter by H. H. Godwin-Austen, who knew Hanley, to Hugh Fulton, in which Godwin-Austen wrote that the Benson collection "was a splendid collection when it first went to Hanley. I remember it well and saw it just as Benson arranged it. He was most particular with locality. Hanley did not believe

in geographical distribution and soon removed it [locality data]." Nonetheless, students of the Indian molluscan fauna have to use the *Conchologia Indica*, because it has many new species of land snails from two biodiversity hot-spots – the Western Ghats (the mountainous region of southwestern India) and Sri Lanka (Naggs & Raheem, 2000; Raheem & Naggs, 2006; Raheem et al., 2009).

Hanley's last book was also his only non-malacological publication, the *Caliphs and sultans, being tales omitted in the usual editions of the Arabian Nights entertainments* (1868a; a second, seemingly identical edition was issued in 1870). This book, published by Reeve, is little remembered today, because Sir Richard Burton's edition of the *Arabian Nights* remains the definitive version. Kirby (1894: 268) tartly noted that Hanley's compilations "hardly require mention" as Hanley evidently did not do any original translations from the Arabic, but merely copied other sources.

Hanley also published his research in journals, primarily in the *Proceedings of the Zoological Society of London* (some articles were reprinted in the *Annals and Magazine of Natural History*). Most of his journal articles were isolated descriptions of new species; even when Hanley described several new species from the same family in a single article, he seldom compared the new species with each other, or with previously described taxa in that family.

Hanley authored several catalogues that attempted to list all the taxa known for a given family, including *Dolium* (now *Tonna*, in the Tonnidae), *Solarium* (now *Architectonica*, in the Architectonicidae), *Melania* (species now placed in a variety of genera of freshwater Cerithioidea), *Nucula* (Nuculidae, Nuculanidae and Yoldiidae) and *Tellina* (Tellinidae). Although a number of the new species described by Hanley in these catalogues have since been synonymized, and the *Melania* catalogue was promptly criticized by the Swiss malacologist Brot (1860), the catalogues were valuable at the time for their extensive listings of the described species in those genera. It should be noted that Hanley's monograph on the Tellinidae (1846a) was of higher quality than some of his other work, for a greater percentage of his new species in that family are still in use today – in contrast to the higher synonymization rates of Hanley's species in other molluscan families.

The Zoology Library of the Natural History Museum has a manuscript notebook volume ("*MS Note-Book on Conchology*" catalogued as

MSS HAN 1), evidently from the early 1850s, with Hanley's lengthy notes on several topics: (1) an index of species of *Melania*, followed by a shorter index of species of *Siphonaria*, presumably used to prepare his publications on those taxa; (2) notes on the Linnean shell collection, used for his 1855 *Ipsa*; and (3) notes on Wood's *Index testaceologicus*, accompanied by cut-and-pasted figures from Wood's edition of that book, evidently used by Hanley in preparing his 1856 edition.

J. B. S. Haldane (1892–1964), a strong advocate of evolutionary biology, was once asked by a churchwoman (or theologian; the sources vary) what the study of evolution had taught him about God. Haldane's famous and possibly misquoted reply was that "God has an inordinate fondness for beetles," referring to the remarkable biodiversity of that group. Williamson (1992) concluded that Haldane probably instead said: "the Creator, if He exists, has a special preference for beetles". It certainly can be said that "Hanley had an inordinate fondness for *Tellina*," since of the 375 species-group names established by Hanley, 94 (or 25%) were in the Tellinidae. Another seven families accounted for 113 species (30%), that is, Veneridae (25 species); Donacidae and Unionidae (18 species each); Architectonicidae (15 species); Mytilidae (14 species); Nuculanidae (12 species); and Ostreidae (11 species).

Bibliographic Notes on Some of Hanley's Works

Several of Hanley's books merit additional bibliographic discussion. One of these is the *British marine conchology* (1844). The title page of this volume gives the authorship as Charles Thorpe, and this was suggested by Norris & Dance (2002: 364, 375) to be a pseudonym of Hanley himself, given that this corresponds to Hanley's middle names. However, we think it was really by a relative (or friend of his parents) named Charles Thorpe, after whom Hanley could have been named. Why this volume was Thorpe's only published book or paper on mollusks remains a puzzle, but he is listed as a "collector" elsewhere (Forbes & Hanley, 1852: 203) and was also noted as a source of manuscript descriptions for some of the species descriptions in Hanley & Theobald's *Conchologia Indica* (1870–1876), in which his last name is spelled as both Thorp and Thorpe. The *British marine conchology* contains a Systematic List (pp. xvii–lx) by Hanley that also includes several new taxa. In this

list, Hanley specifically expressed doubt as to whether Thorpe's sole new species described in the book's main text, *Littorina patula* (p. 259), might instead be merely a variety of *L. rudis* (p. xxxix). That preface, in which Hanley commented on Thorpe's systematics, helps confirm that Hanley was not the author of the main text of this book.

The second work that merits particular attention is his monograph on bivalves, published in parts and under three different titles between 1842 and 1856. While it has been the subject of previous discussions and collations, such as that of Reynell (1918b), we have now clarified one key issue: most copies of the uncommon first version or edition, *An illustrated, enlarged, and English edition of Lamarck's species of shells* (1842–1843), included both an eight-page "Systematic List" and an eight-page "List of Illustrations" that covered as-yet unissued plates. In these lists, some new names first appear as *nomina nuda*. Later, when the plates containing the figures corresponding to the already printed names were produced in what became the second and third versions or editions of the book (1842–1846, 1842–1856), the species names became available, even through the main descriptive text for these taxa had not yet appeared. This recognition of the availability of several taxa from the previously issued plate captions, once the plates themselves were published, results in changes to the dates for a few bivalve taxa. Unambiguous use of dates and letters for each newly available part in the collation in Table 1 and in the Literature Cited herein serves to make clear the sequential appearances of the references and figures of each species, with an underlined date-letter in the catalog of Hanley's taxa, such as "1842d" indicating that point at which the name became available, if it was not made available at its first appearance in a plate caption alone.

Below we set forth the collation of this series. It should be noted that the second version or edition reprinted the first 224 text pages of the first version, along with the indexes; the third version or edition, in turn, reprinted the foregoing text from the first version or edition, along with the additional text pages 225–279 and plates 9–19 from the second version or edition. Oddly, the second and third versions or editions did *not* reprint plates 1–3 and the accompanying captions from the first version or edition. It should be noted that plates 4–8 were never published in any of the three versions or editions, and were not cited in the text.

TABLE 1. The sequential parts of the complex bivalve book by Hanley. *See Literature Cited for full titles & publication details.

Title*	Date range	Total Pagination/Plates	Pages/Plates	Date	Here as
[An illustrated, enlarged, and English edition of Lamarck’s species of shells, ...]	1842–1843	224 + 8 + [3] + 8 pp., 3 pls.	pp. 1–32, pls. 1, 2	late 1842	1842b
			pp. 33–144, pl. 3	early 1843	1843b
			pp. 145–224; 8 pp. (Systematic List), [3] pp. (List of Illustrations = explanations to pls. 1–3), 8 pp. (expls. to pls. 9–13)	late 1843	1843f
An illustrated and descriptive catalogue of Recent shells, ...	1842–1846	272 + 18 pp. everything above (except pls. 1–3 & their explanations)	pp. 225–272, pls. 9–13	late 1843	1843g
			pls. 14–16	1844	1844g
			pp. 9–18 (explanations to pls. 9–19), pls. 17–19	1846	1846c
An illustrated and descriptive catalogue of Recent bivalve shells.	1842–1856	xviii + 392 + 24 pp., pls. 9–24 – everything above (except pls. 1–3, their explanations & 8 pp. Systematic List)	pp. i–xviii, 273–392; pp. 19–24 (explanation for pls. 20–24), pls. 20–24	1856	1856a

We have also seen two versions of the first edition, *Lamarck’s species of shells*, the only difference noted being in the sizes of the type of the footnotes. Both the first and third editions have been digitized and are also present in hard copy in a number of natural history and university libraries. The second edition, however, is only known to us from a single copy in the Mollusca Library, Natural History Museum of the United Kingdom. Nissen (1967: 189) correctly listed the titles of all three editions, but the information that he provided on the pagination and number of plates in each edition is inconsistent with the copies that we have examined.

The third work that needs to be mentioned is Hanley & Theobald’s work on the fauna of British India (1870–1876). While a collation of this work has been available for many years (Prashad, 1927), it has been overlooked by some workers, who incorrectly dated all the included species as “1876.” Also, the authorship of the new taxa in this work is another source of confusion, because some of the new taxa are stated to be by “Hanley & Theobald,” while others are stated to be by “Hanley” alone. The latter taxa should be attributed to “Hanley, in Hanley & Theobald.” Additionally, three new species in the *Conchologia Indica* are named

“*theobaldi*,” which some modern authors would use to conclude that Theobald could not have been their co-author, given that current nomenclatural practice disfavors the naming of new species after oneself (Welters-Schultes, 2011). We refrain from attempting to extend modern ethical practices – which are non-binding even today – on nineteenth century zoology and have attributed all three “*theobaldi*” taxa to Hanley & Theobald. This work is also particularly problematic for having made available manuscript names of other authors, including Benson, disguising the fact that their first appearances were in this work.

It should be mentioned that another source of error in the earlier list of Hanley’s taxa by Norris & Dance (2002) was the incorrect dating of parts of the *Proceedings of the Zoological Society of London*, for which collations are available (Duncan, 1937; Cowan, 1973; Dickinson, 2005). We have indicated the correct date for each such part in the Literature Cited below.

Finally, one small undated pamphlet, *The shells of Margate, Ramsgate and Broadstairs*, was suggested by both Tomlin (1945) and Norris & Dance (2002) as possibly written by Hanley; Tomlin noted that Hanley possessed several copies in his library at his death. However, it was not authored by Hanley but

rather by Robert Chappell Osborne (a printer in Margate, who died in 1875), and is catalogued under Osborne's name in the Library of the Natural History Museum, United Kingdom (Osborne, 184_?). This tract cited Hanley (1840), so it must have appeared after 1840, and its figures were much cruder than those in Hanley (1840). Osborne also published other such tracts for Margate visitors (for example, Osborne, 1835). Perhaps Hanley provided Osborne with some advice, and was rewarded for his assistance with multiple copies of this sadly deficient effort.

History of Hanley's Collections

The identification of Hanley's type material has proven particularly problematic, given the dispersal of his collection, both before and after his death. Because Hanley was not employed at the British Museum or any other institution, he was under no obligation to deposit his type material in any one of them. Some of his new species were based on specimens already in the British Museum collection, and may be found there now. The majority of his new species, however, were based on material in his own collection, that of Hugh Cuming, and of several other contemporary shell collectors.

Hanley maintained a close relationship with Hugh Cuming and relied extensively on his collection in describing new species (concerning Cuming: Dance, 1980). Most of Cuming's collection came to the Natural History Museum, U.K., primarily through a purchase in 1866 at the price of £6,000, comprising 82,992 specimens (Smith, 1906: 710). Hanley also retained some specimens from the Cuming collection that later ended up in the Leeds City Museum. Hanley sometimes gave the localities attributed to Cuming's material in detail and sometimes not. In some cases, Cuming is inferred to be the collector of a species for which his name is not given because it is among others attributed to his collection and from a locality he is known to have visited. Coan (2011) discussed Cuming's eastern Pacific localities.

Another person who was a source of several species named by Hanley was William Metcalfe (18??–1874) (Tomlin, 1944), of whom nothing else is known, and only one (*Cytherea cor*) of the type specimens based on his material was located in 2012. Hanley also described material from the collections of Thomas Lombe Taylor (1802–1874), the Reverend Francis John Stainforth (1797–1866), and William Walton,

some specimens of which are extant in the Natural History Museum, U.K.

During Hanley's life, some of his type material entered the shell trade. One dealer, Robert F. Geale, whose shop was located at 55 Great Russell Street, just across from the British Museum, is known to have acquired specimens from Hanley. Geale started out as a secretary to Cuming, and later opened his own shop (Sheets-Pyenson, 1988: 129). In the early 1870s, Geale traded several Hanley type lots to John Gould Anthony (1804–1877), who was the Curator of Mollusks at the Museum of Comparative Zoology, Harvard University, and those types are now extant in that collection.

Hanley also traded specimens with Sven Lovén (1809–1895), curator of Mollusca at what is now the Swedish Museum of Natural History, Stockholm. Lovén was particularly interested in the cold-water marine fauna of northern Europe, and some of Hanley's type specimens from the region remain extant in that museum (A. Warén, pers. comm. 11 Jan. 2012).

It should be noted that the National Museum of Natural History, Smithsonian Institution (USNM) has several lots of Hanley species labeled as the "figd. type." With one exception (*Natica kingii*, now in the Lithoglyphidae), these are actually the specimens that were later figured by J. G. Jeffreys in his *British conchology* (1862–1869), and do not have any status as Hanley type material.

Hanley bequeathed his shell collection to his wife, who, in turn, "passed the collection into the care of a nephew" (Norris & Dance, 2002: 365). Nothing further is known of this nephew, Crew Hanley, other than that he had no interest in mollusks. According to Smith (1906: 723, 728) and Sherborn (1940: 65), Crew Hanley gave 104 type lots to the British Museum (Natural History) in 1900, but the rest were sold to William Harvey, a shell dealer whose shop was located on Houndsditch Road, due north of the Tower of London. Smith (1906: 728) recorded that Harvey "did not wish to part with any further portions of it." However, over the next decade, the British Museum (Natural History) was able to acquire several large selections of the Hanley collection from Harvey, which were accessioned in 1907 and 1912. The Hanley collection also included types of several species described by Reeve and by the Sowerbys. Most of the type specimens were incorporated into the type collection over the ensuing decades; one of us (Kabat), in June 2012, identified a number of additional type specimens in the

general collection that have now been transferred into the type collection.

It is not known what Harvey did with the remaining specimens after 1912, although by the early 1920s, they were placed in storage at T. R. Roberts, Ltd. (Norris, 1995: 20), a store in Islington (London) later acquired by the House of Fraser, a British department store chain. In 1932, what was left of the collection was presented to the Huddersfield Museum – a small municipal museum in a market town in southern Yorkshire (Norris & Dance, 2002: 365–366). Evidently, the Hanley collection made no impression on the staff at the Huddersfield Museum, for the history of that institution makes no mention of it (Davies, 1992). In 1957, the Huddersfield Museum transferred the Hanley collection to the Leeds City Museum, one of the two largest museums in Yorkshire (the other being the Yorkshire Museum in York, but that institution's molluscan collections are primarily fossils). Norris & Dance (2002: 366) discussed the move of the collection in 1957, the initial efforts by Dance, who was then employed at the British Museum (Natural History), to identify and transfer some of Hanley's type material to the British Museum (Natural History) over the next several years, and the attempts by Norris (who became curator of Natural History at Leeds) and others to curate the remaining parts of the Leeds collection commencing in the late 1970s. It should be noted that Dance, in 1960, initially concluded "that holotypes and figured specimens, even if they are not here [at the Natural History Museum], are unlikely to be at Leeds. From almost every tablet of types, the figured specimens [*sic*] has been removed" (I. C. J. Galbraith, Head of the Mollusca Section, memorandum to F. C. Fraser, Keeper of Zoology, "Sylvanus Hanley Collection – Leeds City Museum," 16 Feb. 1960). However, this conclusion was premature, as a number of holotypes and figured specimens did, in fact, remain in Leeds. Norris (1989: 52) correctly stated that the Hanley collection "is perhaps the most important of all the collections held by the [Leeds City] museum." Norris (1995: 20) explained that when the collection was transferred to Leeds in 1957, "Due to the lack of information ... and some bad advice and guidance in the late 1950s, a considerable amount of irreparable damage was done to the collection because many of the original labels were lost, and as a result, some of the original type and figured specimens are now untraceable."

At the Leeds City Museum, the Hanley collection was accessioned as No. 1957.173, and

catalog numbers were later assigned to 1,287 lots (1957.173.1 to 1957.173.1287), with some additional specimens catalogued in subsequent years. Yet others remain uncatalogued as of 2012. In the ensuing decades, parts of the Hanley collection were incorporated into the general collection, while the rest were kept together as part of a separate Hanley collection. In July 2012, one of us (Kabat) found and moved a number of the Hanley lots from the general collection back to the Hanley collection, thereby facilitating study of that material, and also identified a number of additional hitherto overlooked type specimens.

Hanley's library merits a brief mention. As an independent scholar, Hanley acquired a sizable working library, which enabled him to publish on a wide range of molluscan taxa. Hanley's library evidently remained largely intact after his death, for Ernest Ruthven Sykes (1867–1954) was able to purchase the book collection from a warehouse in London sometime before World War II (Dance, 1986: 189). In 1948, Sykes sold most of the library to Wheldon & Wesley, for prices that were a bargain even then, let alone today, as Dance noted with regret several decades later (Dance, 1986: 190–196; Swann, 1956: 122–123). Richard W. Foster and Richard I. Johnson, two malacologists associated with the Museum of Comparative Zoology, were able to buy many of the books in 1948 for their libraries, and for that of the Museum of Comparative Zoology at Harvard University (Johnson, 2006: 137). It is worth noting the fluctuation in prices for several titles. In 1890, one year after Hanley's death, the *Photographic conchology* could be had for 2 shillings 6 pence, and the *Conchologia Indica* for £3 17 shillings 6 pence (a reduction from the original price in 1876 of £8 5 shillings), while the Forbes & Hanley, *History of British Mollusca* with color plates was £11 11 shillings (Wesley, 1890: 8, 15, 19). In 1948, nearly six decades later, the same dealer had the *Photographic conchology* for £2 10 shillings, Hanley's personal copy of the *Conchologia Indica* for £12, and an uncolored set of the *History of British Mollusca* for £2 10 shillings (Dance, 1986: 192). (Note: prior to 1971, there were 20 shillings to the pound, and 12 pence to the shilling, i.e., 240 pence to the pound.) Today, the *Photographic conchology* is known from seven institutional libraries, while the *Conchologia Indica* is known from over 30 institutional libraries, and the *History of British Mollusca* from numerous libraries, according to the OCLC Worldcat database.

Type Material

The dispersal of Hanley's material, compounded with the poor curation of his own collection after his death, meant that it has not been easy for subsequent authors to determine with certainty whether a given specimen is, in fact, Hanley's original type material. The following factors contributed to this problem. First, Hanley seldom labeled his specimens as "types," and Harvey (or an unknown curator) replaced nearly all of Hanley's original labels with his own on the specimen boxes. Second, Hanley usually gave measurements for each species – and we found those measurements to be reasonably accurate when a species was based on a single specimen or when the measurement was of the figured specimen – but in other cases, those measurements appear to be "averages" of large and small specimens. Salisbury (1934: 91) noted this in remarking that "Hanley appears to have been very casual in the way of giving measurements, and frequently these seem to be a combination, or average, taken from the type lot." Third, while some of Hanley's figures are sufficiently detailed that they can be matched to a particular specimen (i.e., the figured syntype), others, particularly in the three editions of his monograph on the *Bivalvia*, were often reduced or enlarged in order to fit the same number of shells on each plate, and some may even be composites.

Since Hanley described many species from the Cuming collection, the curation of that collection deserves special mention, given that some of what has been published in the past is now known to be incorrect. Breure & Ablett (2011: 5–8, 11) provided a helpful discussion of how the Cumingian and other specimens were curated and re-curated over the decades: (1) Initially, the locality information was written on a loose slip of paper stuffed inside the shell; (2) later, these slips of paper were glued to wooden tablets, with the shells glued to the opposite side of the tablets; (3) some of the shells were then transferred from the wooden tablets to glass-topped cardboard boxes, with the locality information re-written on the bottom of the boxes and on a new label inside the box; (4) some of the cardboard boxes were cut off so that only the bottom portion remains, with the shell and cardboard label transferred to an open specimen box or an archival plastic bag; and, most recently (5) some of the labels were soaked off the cardboard, and transferred with the shell to an archival plastic bag. Examples

of all five curatorial methods can be found in the Natural History Museum today. Errors in taxonomic names or localities could have occurred while re-writing the labels.

Three provisions of the *International Code of Zoological Nomenclature* (ICZN, 1999) were applied in determining the type status of Hanley's type material. Of course, it must be recognized that the *Code* did not exist in Hanley's time, so Hanley can hardly be blamed for the fact that his descriptions require careful scrutiny under the current *Code* provisions. Further, the current provisions regarding lectotype designations did not exist until the 1985 edition of the *Code*, so that several authors prior to 1985 inadvertently designated lectotypes by referencing a specimen as the "holotype" when it was one of several syntypes.

ICZN *Code* Article 73.1, governing holotypes, makes clear that a holotype can only be inferred if the original description is clearly based on a single specimen, or the author used the term "holotype" or "the type." Hanley did not use either term in his descriptions, and he seldom indicated that a new species was based on a single specimen. When he did, that specimen, if it can be found, is the holotype. Since Hanley did not use the terms "holotype" or "the type," that means that there is no such thing as a Hanley "paratype," which is only used when the original description specified that there was a holotype or "the type" (Article 72.4.5).

If the original description was either expressly based on multiple specimens, or the original description gave no indication as to the number of specimens, then ICZN *Code* Article 73.2 requires that the type material, if found, be treated as syntypes. Thus, even if only one specimen is extant, it must be treated as a syntype. For many of Hanley's new species, he indicated that the species was known from more than one locality, or was present in more than one collection. Several other new species had descriptions that clearly referred to multiple specimens, sometimes by contrasting juveniles with adults, or indicating a range of color patterns in different specimens. However, the remaining new species had no indication as to the number of specimens, and while they could have been based on only one specimen, any such specimen must be treated as a syntype, not a holotype. Taken together, the majority of Hanley's new species fall under the *Code*'s Article 73.2, and their type material, if found, must be treated as syntype(s), even if only one specimen is now extant.

The ICZN *Code*'s provisions governing lectotypes have proven particularly problematic for researchers and curatorial staff. Prior to the 1980s, it was common for subsequent revisers to identify the figured specimen as the "holotype," and the remaining specimens as "paratypes." For Hanley's new species, such an act would be incorrect, since the only Hanley species for which there are holotypes are those that were clearly based on a single specimen. For those authors who published prior to 2000, ICZN *Code* Article 74.5 provides that the use by a subsequent author of the term "holotype" is *not* a valid lectotype selection "when the original work reveals that the taxon had been based on more than one specimen ... unless the author, when wrongly using that term, expressly indicated that he or she was selecting from the type series that particular specimen to serve as the name-bearing type." In contrast, ICZN *Code* Article 74.6 provides that if "it has been accepted that a nominal species-group taxon was based on a single specimen *and* the original description neither implies nor requires that there were syntypes, *and* if it is considered subsequently that the original description was based on more than one specimen" (emphasis added), then a pre-2000 citation of a specimen as the "holotype" is a valid lectotype designation.

Finally, for lectotype designations made after 1999, ICZN *Code* Article 74.7 requires even greater specificity in the designation, but that only affects a few of the Hanley species. It should be noted that ICZN *Code* Article 74.7.3 was amended in 2003 (retroactively to 1 January 2000) to require that such lectotype designations "contain an express statement of deliberate designation (merely citing a specimen as 'lectotype' is insufficient)." (ICZN Declaration 44, 2003). ICZN Recommendation 74G was also added in 2003, to make clear that for lectotypes, "The designation of lectotypes should be done as part of a revisionary or other taxonomic work to enhance the stability of nomenclature, and not for mere curatorial convenience." (Article 75.2 similarly prohibits neotype designations as a matter of convenience.)

As will be seen in the catalog below, the current provisions of the ICZN *Code* have rendered invalid the statements by a number of pre-1980 authors that a certain specimen was the "holotype" of a Hanley species, while treating such statements for yet other species as lectotype designations. For example, the

discussion of *Tellina* type material by Salisbury (1934) contains both inadvertent lectotype designations and erroneous identifications of holotypes. Salisbury (1934: pl. 11, fig. 5), identified a specimen as the "holotype" of *Tellina ancilla* Hanley, 1844. The lot contains two specimens, while the original description satisfies ICZN *Code* Article 74.6, so that Salisbury's action constitutes a valid, inadvertent lectotype designation. However, Salisbury (1934: pl. 13, figs. 7–9) identified another specimen as the "holotype" of *Tellina hiberna* Hanley, 1844 – a species that was clearly based on more than one specimen, from two localities, so that the original description instead satisfies ICZN *Code* Article 74.5, and Salisbury's action was not a valid lectotype designation. Numerous other examples of lectotype designations, valid or invalid, are set forth in the catalog below.

Just as it is no longer considered routine to designate a lectotype in the absence of a need to clarify the concept of a species, it is no longer routine to "restrict", "designate" or clarify a type locality when the original was broadly stated or unknown. (The term "clarify" is used in Recommendation 76A of the present *Code*.) In the cases of two Hanley taxa, subsequent authors in the 1950s and 1960s made such "restrictions", as was routine then. However, now it is often prudent to clarify a type locality when the original locality was unknown, and important to do so when it was incorrect. Such restrictions are often invalid because the type locality is tied to the primary type(s) under ICZN Article 76.1. These tasks are best done in the context of revisionary work, and we have not done so in this paper.

Hanley's Taxa

Hanley introduced 375 new species-group names for mollusks (255 in the Bivalvia and 120 in the Gastropoda), of which 367 are available and 8 are *nomina nuda*. Of the 367 available names, 219 (167 in the Bivalvia and 52 in the Gastropoda) are currently considered valid or are probably valid, or have not yet been assessed in the modern systematic literature (other than in uncritical checklists), and 148 (86 in the Bivalvia and 62 in the Gastropoda) are now known to be junior synonyms, junior homonyms, or have been treated as *nomen dubia*. An additional 53 species-group names were described by other authors, primarily Lovell Reeve, from Hanley manuscript names, or were erroneously attributed to Hanley by other authors.

Type material is known for 225 of the 367 available new species (176 in the Bivalvia, or 69% of his described bivalve species; 49 in the Gastropoda, or 41% of his described gastropod species), leaving 142 of the new species as yet without type material (77 in the Bivalvia and 65 in the Gastropoda). It should be noted that three of Hanley’s bivalve species are represented by neotypes (one species each in the Nuculanidae, Ostreidae, and Solenidae), which still leaves 173 bivalve species (68%) represented by original type material.

Hanley also introduced two family-level names, both in the Gastropoda, of which one is in current use (Cancellariidae), the other now a junior synonym (Elysiidae). Hanley introduced six genera, of which two are in current use (*Cerithiopsis* and *Propilidium*, both in the Gastropoda) and four are junior synonyms (*Cavolina*, *Cochlycopa*, *Lucinopsis* and *Pilidium*); an additional eight generic names were errors by Hanley or were erroneously attributed by others to Hanley.

We have included the one taxon named by Charles Thorpe in the 1844 book that some authors attributed to Hanley. We have not included taxa described by other authors, such as Alder, expressly made available as by those authors within Forbes & Hanley (1848–1853), the taxa in Bean’s Appendix to Thorpe (1844), nor any of the non-mollusks, such as tunicates, proposed by Forbes & Hanley.

Whereas most of Hanley’s taxa were noted by him as being new, some were erroneously attributed by Hanley, or by Hanley & Theobald, to other workers but were in fact first made available by Hanley. It is possible that there remain yet other unrecognized Hanley taxa, such as in his lengthy edition of Wood’s *Index testaceologicus* (Hanley, 1856b), but none have come to our attention as being from that work.

The entries are grouped by molluscan class and family, in systematic order following Bouchet & Rocroi (2005, 2010), and are alphabetical within each family, with the true Hanley names listed first. The Hanley work or works covering the names are in chronological order, keyed to the Literature Cited entries. If a taxon first became available in a work other than the first one noted, such as in a caption or description published later than an uncaptioned illustration, this entry is underlined. The type locality is given, with bracketed notes added for some to clarify Hanley’s terminology or to provide updated information on modern geo-

graphical names. Information on the modern interpretation of the taxon is given, as we noted in the literature available to us. Finally, if type material is known, we specify its museum(s) and catalogue number(s).

The following is a list of the taxa that were introduced by Hanley, both available and *nomina nuda*, whether or not currently considered valid, as well as names that have been incorrectly attributed to him. His names are in boldface at the beginning of each family. Those now considered valid, or that are probably or possibly valid, are indicated by an asterisk. Those lacking an asterisk are considered synonyms of earlier taxa, or are junior homonyms that have been superseded by later synonyms or replacement names.

The list of taxa not in boldface under each family and with “Hanley” in quotation marks, are those misattributed to Hanley by Sherborn, Reeve or other authors. We have not included names expressly indicated by Sherborn as merely being transfers by Hanley from other genera of earlier, non-Hanley species. The list also contains some Hanley misspellings or invalid emendations of the names of earlier taxa. It should be noted that when Hanley described a taxon as a “variety” (“var.”) of a species, he followed the classical tradition in giving the varietal name the gender of “varietas” and not of the genus in which the variety was described, which explains why some of Hanley’s varieties do not match the gender of the genus.

Acronyms

Leeds Museum	Leeds City Museum, Leeds, U.K.
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A.
NHM	UK Natural History Museum of the United Kingdom, London [formerly British Museum (Natural History)], U.K.
SMNH	Swedish Museum of Natural History, Stockholm, Sweden
USNM	National Museum of Natural History, Washington, D.C., U.S.A.
*	Names considered valid (i.e., neither a junior synonym nor a junior homonym that have been replaced).

BIVALVIA
Nuculidae

Nuculanidae

antipodum, Nucula – Hanley, 1860c: 159–160, 166, pl. 230, fig. 155; 1861b: 441. Australia; Hanley coll. Synonym of *Leionucula obliqua* (Lamarck, 1819) (Lamprell & Healy, 1998: 34–35, fig. 12). The generic name *Ennucula* is now preferred over *Leionucula* (Huber, 2010: 523). Type material not found in NHMUK or Leeds Museum in 2012.

****malabarica, Nucula*** – Hanley, 1860c: 155–156, 167, pl. 230, fig. 152; 1861b: 441. Cochin, Malabar, India; Hanley coll. Listed by Prashad (1933: 129) as a valid species, but one that he had not seen. Type material not found in NHMUK or Leeds Museum in 2012.

mandraei, Nucula – Hanley, 1860c: 161–162, 167, pl. 229, fig. 143, as “*m’andraei*”; 1861b: 441–442, as “*m’andrewii*”. Tunisia; M’Andrew (Hanley, 1861b); Cuming coll. There was nothing in the original account to indicate that the species was intended to honor M’Andrew, and thus the original misspelling must stand (ICZN Code Art. 32.5). Synonym of *Ennucula aegeensis* (Forbes, 1844) (Sabelli et al., 1990: 274, as “*macandrewi*”). NHMUK 1992167, four possible syntypes.

mauritii, Nucula – Hanley, 1859c: 237, *nomen nudum*. Mentioned as “(Hanley as of Hinds), Recent Bivalves”, but not located therein.

radiata, Nucula – Hanley, in Forbes & Hanley, 1849: 220–221, pl. 47, figs. 4, 5, pl. 48, fig. 7; Hanley, 1860c: 149–150, 168, pl. 229, figs. 123, 124. *Non Nucula radiata* De Kay, 1843, *non N. radiata* Portlock, 1843. Renamed *Nucula hanleyi* Winckworth, 1931. South Devon, Torbay (Alder & Hanley). Milford Haven, in 10 fms. [18 m], “always in separate parts of the bay from *nucleus*” (M’Andrew & Forbes); Lundy Island, 7 to 25 fms. [13–46 m], in sandy-gravel (M’Andrew). Lamlash, Arran (Alder); “and, probably, Exmouth (Clark)”. *Nucula (Nucula) hanleyi* Winckworth, 1931 (Tebble, 1976: 27; Huber, 2010: 86). NHMUK 1848.10.13.22–25, four possible syntypes (M’Andrew collection); NHMUK 1992166, four possible syntypes (South Devon, Teignmouth); SMNH 3657, syntypes. USNM 1917180, from the Jeffreys collection, is labeled as the “figured type,” but this is merely the specimen figured by Jeffreys in his *British conchology* (1869: pl. 29, fig. 2a).

****brookei, Leda*** – Hanley, 1860c: 132–133, 166, pl. 229, fig. 106; 1861b: 440, as *L. brookii*. Borneo; Cuming coll. Type material not found in NHMUK or Leeds Museum in 2012.

****confusa, Leda*** – Hanley, 1860c: 119–120, 166, pl. 228, fig. 85. Japan, China. *Saccella confusa* (Hanley, 1860) (Xu, 2004: 211; Huber, 2010: 96). NHMUK 1996503, three possible syntypes (largest was figured by Hanley, 9.2 mm x 16.5 mm; also figured by Higo et al., 2001: 147, fig. B69).

****conradi, Leda*** – Hanley, 1860c: 130–131, 166, pl. 229, fig. 101; 1861b: 440. Loc. unknown; Taylor coll. NHMUK 1879.2.26.239, holotype (4.4 mm x 8.8 mm).

****dohrni, Leda*** – Hanley, 1861c: 242. Pacific Ocean; Dohrn. The eastern Australian *Nuculana (Scaeoleda) dohrni* (Hanley, 1861) (Lamprell & Healy, 1998: 40, fig. 38). Type material not found in NHMUK or Leeds Museum in 2012.

***gibbosa, Leda elenensis* var.** – Hanley, 1860c: 121–122. *Non Nucula gibbosa* G. B. Sowerby I, 1833, then regarded as belong in the same genus. Hanley’s variety is now regarded as a synonym of *Saccella elenensis* (G. B. Sowerby I, 1833) (Coan & Valentich-Scott, 2012: 76). It is difficult to explain why, in discussing his new variety, Hanley cited Sowerby’s original figure of *Nucula gibbosa*, which Hanley had listed as a separate species of *Leda* on the previous page. Perhaps it was to indicate its analogous width, hence the varietal name (see also under *media* below). (Sowerby’s *Nucula gibbosa* is a primary junior homonym of *Nucula gibbosa* Fleming, 1828, with the name in current use for Sowerby’s taxon being *Saccella fastigata* (Keen, 1958) – Coan & Valentich-Scott, 2012: 76.) Type material not found in NHMUK or Leeds Museum in 2012.

****hindsii, Leda*** – Hanley, 1860c: 135, 167, pl. 229, fig. 102; 1861b: 440–441. Golfo de Nicoya, Costa Rica; probably collected by H. Cuming; Cuming, Hanley & Metcalfe colls. The tropical eastern Pacific *Saccella hindsii* (Hanley, 1860) (Coan & Valentich-Scott, 2012: 76–77, as “1861”). SBMNH 359319, neotype from Puntarenas on the Golfo de Nicoya (Coan & Valentich-Scott, 2012).

***media, Leda elenensis* var.** – Hanley, 1860c: 121–122. On p. 122, Hanley cited a figure in his catalogue, “(*Nuc. cuneata*, Hanley,

Rec. Bivalves, pl. 19, f. 57, not description”); however, he evidently meant to cite fig. 58, i.e., his figure of *N. cuneata* G. B. Sowerby I, 1833, from Chile. Here again the citation may have been intended to indicate an analogous shape. The variety *media* is regarded as a synonym of *Saccella elenensis* (G. B. Sowerby I, 1833) (Coan & Valentich-Scott, 2012: 76). Type material not found in NHMUK or Leeds Museum in 2012.

metcalfei, *Leda – Hanley, 1860c: 110–111, 167, pl. 227, fig. 34; 1861a: 370, as *L. metcalfii*. Philippine Islands; Cuming & Hanley colls. This is an *Adrana*, a genus found only the New World, so the type locality was probably incorrect. It is possibly an older name for *Adrana exoptata* (Pilsbry & Lowe, 1932), from the tropical eastern Pacific (M. Huber, 2010: 532). NHMUK 20030195, syntype (too fragile to measure) (original description refers to “only two” specimens; second syntype not found).

micans, *Leda – H. Adams & A. Adams, 1858: 547, *nomen nudum*; Hanley, 1860c: 130, 167, pl. 229, fig. 100, ex A. Adams ms. “New Zealand”; [Cuming coll.]. Not mentioned in Powell (1979). Beu (2006: 172) examined the “holotype” (labeled as having come from the Cuming collection), and suggested that this taxon is an earlier name for the northeast Australian *Saccella darwinii* (E. A. Smith, 1884). Huber (2010: 531) further suggested that both merit close comparison with *S. inconspicua* (A. Adams, 1856), also from Australia, which may be a still earlier name. NHMUK 20040714, syntype (Hanley’s description does not indicate whether it was based on one or more specimens).

producta, *Leda confusa var. – Hanley, 1860c: 120. Type locality not specified; presumably that for *Leda confusa* Hanley, 1860, described from “Japan, China.” Type material not found in NHMUK or Leeds Museum in 2012.

pyriformis, *Leda elenensis* var. “?” – Hanley, 1860c: 121–122. Synonym of *Saccella elenensis* (G. B. Sowerby I, 1833) (Coan & Valentich-Scott, 2012: 76). Type material not found in NHMUK or Leeds Museum in 2012.

taylori, *Leda* – Hanley, 1860c: 109–110, 168, pl. 227, fig. 35; 1861a: 370. Guatemala; Cuming & Taylor colls. Synonym of the tropical eastern Pacific *Adrana crenifera* (G. B. Sowerby I, 1833) (Coan & Valentich-Scott, 2012: 61, as “1861”). NHMUK 20030194, two syntypes (Cuming collection).

Malletiidae

brevior, *Solenella norrisii* var. – Hanley, 1860c: 164. Valparaiso, Chile; Cuming coll. Presumably a synonym of *Malletia chilensis* Des Moulins, 1832, of which *Solenella norrisii* G. B. Sowerby I, 1833, is a synonym. Type material not found in NHMUK or Leeds Museum in 2012.

cumingii, *Solenella – Hanley, 1860c: 164–165, 166, pl. 226, fig. 3; 1861b: 441. Falkland Islands; Cuming coll. *Malletia cumingii* (Hanley, 1860), which occurs in the Falkland Islands and adjacent southeastern South America (Huber, 2010: 539; D. Zelaya, pers. comm., 31 May 2012). Type material not found in NHMUK or Leeds Museum in 2012.

Yoldiidae

woodwardi, *Leda (Yoldia) – Hanley, 1860c: 140–141, 168, pl. 226, figs. 17, 22; 1861a: 370–371, as *Yoldia*. Falkland Islands; Cuming, Hanley & Taylor colls. Dell (1964: 146–147, pl. 2, fig. 11) treated this as a junior synonym of the circum-Antarctic *Yoldia (Aequiyoldia) eightsi* (Couthouy, in Jay, 1839). However, Rabarts & Whybrow (1979) concluded that Hanley’s name was a distinct species of *Yoldia*. NHMUK 19764 and NHMUK 19765, two syntypes (Falkland Islands, Cuming collection) (figured by Rabarts & Whybrow, 1979: 180, fig. 16).

Mytilidae

arcuatula, *Modiola – Hanley, 1843g: 236; 1844b: 16. Philippine Islands (1843g); Singapore; low water (1844b). *Arcuatula arcuatula* (Hanley, 1843) from Southeast Asia (Lyngby, 1909: 133; Huber, 2010: 112). Type species of *Arcuatula* Jousseaume in Lamy, 1919, by tautonymy. Soot-Ryen (1955: 55) erroneously stated that the type species of this genus was *Modiola plicata* Lamarck, 1819. This is not the brackish and freshwater species discussed and figured by Brandt (1974: 257–258, 380, pl. 18, fig. 21) as “*Brachidontes arcuatulus* (Hanley)” from Thailand, which is instead *Brachidontes evansi* (E. A. Smith, 1903). Type material not found in NHMUK or Leeds Museum in 2012.

biradiata, *Modiola – Hanley, 1843g: 235–236; 1844b: 15. “South America?”. *Gibbomodiola biradiata* (Hanley, 1843) from the western Indo-Pacific (Huber, 2010: 124). Type material not found in NHMUK or Leeds Museum in 2012.

canaliferus, *Modiola (Lithodomus) – Hanley, 1843g: 239; 1844b: 16–17, as *Lithodomus*; 1856a: 387, 23 (pl. expl.), pl. 24, fig. 22. Zebu, Philippine Islands; on rocks. *Lithophaga (Diberus) canalifera* (Hanley, 1843) (Kleemann, 1983: 4–5). NHMUK 1907.10.28.52, lectotype (selected by Kleemann, 1983: 4–5); NHMUK 1907.10.28.53, paralectotype; Leeds Museum 1957.173.24634, three paralectotypes.

cuneiformis, Modiola – Hanley, 1843g: 237; Philippine Islands, as “Zool. P. 1844”, but not published therein. Later, Hanley (1856a: 387–388) noted that he had mistakenly inserted under this species name on p. 237 a description of *Modiola elongata* (Swainson, 1821). That being the case, and without an original figure, this would make *M. cuneiformis* either (1) a synonym of *M. elongata*, or (2) a name for what Hanley had in hand that he thought was a new species, in that Hanley’s later figure (1856a: pl. 24, fig. 28) has been interpreted as a specimen of the Indo-Pacific *Jolya rhomboidea* (Reeve, 1857) (Huber, 2010: 556–557), assuming that Reeve’s species can be distinguished from the former based on Hanley’s description alone. (See also under *elongata, Modiola* below.) Type material not found in NHMUK or Leeds Museum in 2012.

granulatus, *Mytilus – Hanley, 1843g: 246; 1844b: 17; 1856a: 388, 24 (pl. expl.), pl. 24, fig. 33. “S. America” (1843g); Valparaíso, Chile; under rocks at low water; H. Cuming (1844b). [Non *Modiola granulata* Potiez & Michaud, 1844: 132, pl. 54, fig. 10, a fossil from an unknown locality]. The 1843g entry was listed in error by Sherborn (1926: 2808) as having been proposed in *Modiola. Brachidontes granulatus* (Hanley, 1843) from Peru and Chile (Forcelli, 2000: 149, as “1844”; Huber, 2010: 117). NHMUK 1900.2.8.13–18, six syntypes (“Chili”).

metcalfei, *Modiola – Hanley, 1843g: 235; 1844b: 14; 1856a: 387, 23 (pl. expl.), pl. 24, fig. 25. Philippine Islands. The western Pacific *Modiolus metcalfei* (Hanley, 1843) (Lynge, 1909: 131; Hylleberg & Kilburn, 2002: 58; Wang, 2004a: 230, pl. 122, fig. G); however, older names for this species may be *Modiola microptera* Deshayes, 1836, and *Musculus modulaides* Röding, 1798 (Huber, 2010: 554). NHMUK 196589 and NHMUK 196590, two syntypes (Higo et al., 2001: 148, fig. B110, as “lectotype,” in error). NHMUK 196588 was determined by B.R. Wilson (1982, note

in collection) not to be a type specimen, and NHMUK 1907.10.28.108 was determined by S. Morris (1982, note in collection) to be a different species.

philippinarum, *Modiola – Hanley, 1843g: 235; 1844b: 15; 1856a: 387, 23 (pl. expl.), pl. 24, fig. 26. Zebu, Philippine Islands. The western Pacific *Modiolus philippinarum* (Hanley, 1843) (Lynge, 1909: 132; Hylleberg & Kilburn, 2002: 58; Wang, 2004a: 230, pl. 122, fig. I; Huber, 2010: 123). NHMUK 19829, three syntypes (NHMUK 19829/1 was figured by Reeve, 1858, pl. 1, fig. 1, and by Higo et al., 2001: 148, fig. B111); Leeds Museum 1957.173.24629, syntype (Hanley’s figured specimen, 91.7 mm x 45.6 mm); Leeds Museum 1957.173.24630–24632, three possible syntypes.

plumula, *Modiola (Lithodomus) – Hanley, 1843g: 239–240; 1844b: 17, as *Lithodomus*; 1856a: 387, 23 (pl. expl.), pl. 24, fig. 23. Philippines (1843g); Panama; in *Spondylus* (1844b), the latter probably correct. The tropical eastern Pacific and Indo-Pacific *Lithophaga (Diberus) plumula* (Hanley, 1843) (Coan & Valentich-Scott, 2012: 137–138). *Modiola plumula* Hanley, 1843, is the type species of *Diberus* Dall, 1898, by original designation. NHMUK 1907.10.28.50, lectotype (selected by Kleeman, 1983: 20); NHMUK 197595, three paralectotypes; Leeds Museum 1957.173.24633, one paralectotype.

sordida, Modiola – Hanley, 1843g: 236; 1844b: 16. Loc. unknown; Metcalfe coll. A type specimen has not been located, and there was no figure, so this is best regarded as a *nomen dubium* (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

striatula, *Modiola – Hanley, 1843g: 241; 1844b: 14; 1856a: 388, 23 (pl. expl.), pl. 24, fig. 29. Batangas, Philippine Islands. *Brachidontes striatulus* (Hanley, 1843) from Southeast Asia (Huber, 2010: 118). NHMUK 1907.10.28.54, figured syntype (Higo et al., 2001: 148, fig. B97); NHMUK 1965106, three syntypes; NHMUK 1985010, three syntypes. Morton & Tan (2003: 143) stated that the “holotype” is in the Leeds Museum, but no such specimen was found in 2012.

strigata, *Modiola – Hanley, 1843g: 243; 1844b: 15–16. Sibango, Zebu; 10 fms. [18m], mud. The southeast Asian *Musculus strigatus* (Hanley, 1843) (Huber, 2010: 111). Type material not found in NHMUK or Leeds Museum in 2012.

strigatus, *Mytilus* – Hanley, 1843g: 251, ex Hinds ms, as “Z. P. 1844”, but not published in therein; 1856a: 388, 24 (pl. expl.), pl. 24, fig. 34. Loc. not stated. Synonym of *Mytella charuana* (d’Orbigny, 1842) (Coan & Valentich-Scott, 2012: 115). NHMUK 1907.12.30.339, holotype (40.8 mm x 16.2 mm).

subramosa, *Modiola – Hanley, 1843g: 241; 1844b: 14–15; 1856a: 388, 23 (pl. expl.), pl. 24, fig. 30. Cagayan, Mindanao, Philippine Islands. The Indo-Pacific *Brachidontes subramosus* (Hanley, 1843) (Lyngø, 1909: 134, as “1844”; Huber, 2010: 118). NHMUK 1907.10.28.49, figured syntype (31.4 mm x 12.6 mm); NHMUK 1963440, three syntypes.

tumida, *Modiola* – Hanley, 1843g: 241. England. This unfigured species, not indicated as being new, was based on eight earlier references to *Mytilus discors* Linnaeus, 1767, and two references to *Modiola discrepans* Lamarck, 1819 (*non M. discrepans* Montagu, 1803), together with a short description. Hanley thus distinguished the true *Modiolus discors* (Linnaeus) from the “discors” of the cited authors. Formerly treated as the eastern Atlantic *Modiolarca tumida* (Hanley, 1843) (Bowden & Heppell, 1966: 103, 116; S. M. Smith & Heppell, 1991: 60), but more recently regarded as a junior synonym of *Modiolarca subpictus* (Cantraine, 1835), which itself had earlier been regarded as a *nomen dubium* (Huber, 2010: 111). This symbiotic species resides within the tests of sea squirts (ascidians) (Roberts & Breen, 1985; Morton & Dinesen, 2011). Type material not found in NHMUK or Leeds Museum in 2012; because it was described from earlier references, the type material is that of those previous authors and any specimens available to Hanley.

brasiliensis, *Modiola* – “Hanley”, 1843g: 234. Guyana. This was intended to represent *Modiola brasiliensis* Gray, 1825. Gray (1825: 139) cited two figures in Chemnitz (1795: pl. 205, figs. 2018, 2019) of a species of *Pteria* instead of the adjacent figures he had intended to cite (figs. 2020, 2021). However, his additional citation of *Mytilus latus* Dillwyn (1817: 311–312), who under one of his synonyms cited the correct Chemnitz figures, as well as Gray’s placement of this species in *Modiola*, makes Gray’s intent clear. Gray’s species has been regarded as a synonym of *Mytella guyanensis* (Lamarck, 1819) (Coan &

Valentich-Scott, 2012: 115–117, who mistakenly credited *brasiliensis* to Hanley). However, Gray’s species may instead be a synonym of *Mytella bicolor* (Bruguère, 1792), which has recently been regarded as distinct, occurring both in the western Atlantic and eastern Pacific, with *Mytella guyanensis* (Lamarck, 1819) present only in the western Atlantic (Huber, 2010: 113, 547).

elongata, *Modiola* – “Hanley”, 1856a: 387–388, 23 (pl. expl.), pl. 24, fig. 28. Hanley (1856a) was well aware of the use of this name by Swainson (1821), having published the 1841 edition of Swainson’s *Exotic Conchology* himself. In 1856, Hanley noted that he had mistakenly inserted the description of *Modiola elongata* under his own *M. cuneiformis* (Hanley, 1843g: 23) (see above). *Modiola elongata* can thus not be taken as the proposal of another, homonymous species. Huber (2010: 556–557) considered that what Hanley illustrated as *M. elongata* Swainson was actually a specimen of the Indo-Pacific *Jolya rhomboidea* (Reeve, 1857).

nigra, *Modiola* – “Thorpe”, 1844: 249. Listed by Sherborn (1928: 4316) as also being by Thorpe, but is the same as *Modiola nigra* Gray, 1824, also listed by Sherborn.

patagonica, *Modiola* – “Hanley”, 1843g: 236, ex d’Orbigny ms. Patagonia. Hanley treated this species as if it were an unpublished manuscript name, but it had become available with publication of d’Orbigny’s plate 85 with caption in 1842; d’Orbigny’s corresponding text (pp. 646–647) did not appear until 1846. *Mytilus patagonicus* d’Orbigny, 1842, is probably a synonym of *Mytilus galloprovincialis* Lamarck, 1819.

rhomboidea, *Modiola* – “Hanley”. Reeve (1857: pl. 6, fig. 28) attributed this species to Hanley (“Species Recent Shells”), but Hanley did not name this Indo-Pacific species and it should be attributed to Reeve, who incorrectly indicated a West African origin.

Arcidae

deshayesii, *Arca* – Hanley, 1843f: 157 (footnote to description of *Arca antiquata*); 1843g: 371; 1844g: 16 (pl. expl.), pl. 18, f. 42. Also based on Gualtieri (1742: pl. 87B) and Bruguère (1798: pl. 306, fig. 1). Synonym of the western Atlantic *Anadara notabilis* (Röding, 1798) (Weisbord, 1964: 69–72, pl. 5, figs. 7–10). NHMUK 1907.10.28.126, “possible holotype” (Stevenson, 1973: 197) (44.0 mm x 28.3 mm).

Pteriidae

mazatlanica, *Meleagrina – Hanley, 1856a: 388, 24 (pl. expl.), pl. 24, fig. 40. Mazatlán [Sinaloa], Mexico. The tropical eastern Pacific *Pinctada mazatlanica* (Hanley, 1856) (Coan & Valentich-Scott, 2012: 216–217). Type material not found in NHMUK or Leeds Museum in 2012.

Isognomonidae

listeri*, *Perna – Hanley, 1843g: 259. West Indies. Also cited Lister (1687: pl. 228, fig. 63) and Klein (1753: pl. 8, fig. 19). Synonym of the western Atlantic *Isognomon radiatus* (Anton, 1838) (Lamy, 1933: 397; Tunnell et al., 2010: 320). NHMUK 1907.10.28.7, possible syntype (45.3 mm x 26.8 mm).

Pinnidae

carolinensis*, *Pinna – Hanley, 1858d: 225–226. Carolina, U.S.A. [“restricted” to Beaufort, North Carolina by Turner & Rosewater, 1958]; Cumming & Hanley colls. Synonym of *Atrina rigida* [Lightfoot, 1786] (Turner & Rosewater, 1958: 312–314, as “Solander”). Type material not found in NHMUK or Leeds Museum in 2012.

chemnitzii*, *Pinna – Hanley, 1858b: 136. Philippine Islands; H. Cumming; Cumming & Hanley colls. Rosewater (1961: 211–215) considered this to be a synonym of *Atrina pectinata* (Linnaeus, 1758). However, recent work suggests that it is instead a synonym of the Asian *Atrina chinensis* (Deshayes, 1841) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1952.8.29.12, syntype (Wilkins, 1953a: 27, erroneously stated that this was the “holotype,” but Hanley’s original description reveals that the taxon was based on more than one specimen, from two collections (ICZN Code Article 74.5) (measured by Wilkins as 280 mm x 128 mm); NHMUK 1952.8.29.13, syntype.

****hystrix*, *Pinna*** – Hanley, 1858d: 226. Amboyna; Cumming & Hanley colls. Mistakenly regarded as a synonym of *Atrina vexillum* (Born, 1778) by Rosewater (1961: 204–207), it is instead the distinct Indian Ocean *Atrina hystrix* (Hanley, 1858) (Lynge, 1909: 148–149; Huber, 2010: 165). NHMUK 1952.8.29.28–30, syntypes (three specimens and one loose valve; two are 2 inches longer than the measured length given by Hanley, and the others are much smaller). Wilkins (1953a: 27)

stated that the NHMUK lot consisted of “three paratypes,” and also referred to the “Holotype in Mus. Hanley (not located).” This was not a valid lectotype designation, because Hanley’s original description reveals that the taxon was based on more than one specimen (ICZN Code Article 74.5).

kraussii*, *Pinna – Hanley, 1858d: 226. Natal; Hamilton, Hanley & Sowerby colls. Synonym of *Atrina squamifera* (G. B. Sowerby I, 1835) (Rosewater, 1961: 207–210). Type material not found in NHMUK or Leeds Museum in 2012.

minax*, *Pinna – Hanley, 1858d: 227. “New Guinea? Mexico?”; Hanley coll. “Perhaps a strongly spined form” of *Atrina vexillum* (Born, 1778) (Winckworth, 1929: 293). No type material has been located, and there was no original or subsequent figure by Hanley, so this is best regarded as a *nomen dubium* (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

rostellum*, *Pinna – Hanley, 1858d: 227–228. Indian [Ocean] islands; Cumming & Hanley colls. Regarded by Rosewater (1961: 193–199) as a synonym of the rare Red Sea *Pinna bicolor* Gmelin, 1791. However, there was no original figure and no type material has been located, so it should be regarded as a *nomen dubium* (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

In his monograph on *Pinna*, Reeve (1858–1859) obtained a number of Hanley’s manuscript names, perhaps from labels in the Cumming collection, and published them before Hanley’s paper appeared. He also credited two taxa to Hanley that were not among those Hanley ever published. All these should be credited to Reeve, ex Hanley ms, not to Hanley in Reeve. Reeve’s Latin descriptions are all much shorter and very different, his English text is not that present in Hanley’s publication, and figures have been added. While it is clear that Reeve knew that a Hanley publication was in press, he may not have even seen a Hanley manuscript or proofs. The type material for these species in the NHMUK is all correctly labeled with Reeve as the author, and Wilkins (1953a: 27–29), in his type catalog, attributed them to Reeve alone. The species involved, all published in 1858, are *Pinna assimilis* (pl. 31,

fig. 59 – Reeve, Aug.; Hanley, Nov.), *P. cumingii* (pl. 16, fig. 29 – Reeve, May; Hanley, Nov.), *P. dorbignyi* (pl. 26, fig. 49 – Reeve, Aug.; Hanley, Nov.), *P. euglypta* (pl. 20, fig. 37 – Reeve, June; Hanley, Nov.), *P. fumata* (pl. 15, fig. 27 – Reeve, May; Hanley, Nov.), *P. gouldii* (pl. 11, fig. 21 – Reeve, May; Hanley, Nov.), *P. japonica* (pl. 25, fig. 47; never published by Hanley), *P. menkei* (pl. 18, fig. 34 – Reeve, June; Hanley, Nov.), *P. philippiensis* (pl. 11, fig. 20; never published by Hanley), *P. regia* (pl. 30, fig. 56 – Reeve, Aug.; Hanley, Nov.), *P. rumphii* (pl. 5, fig. 9 – Reeve, April; Hanley, July), and *P. strangei* (pl. 27, fig. 52 – Reeve, Aug.; Hanley, Nov.).

Ostreidae

bicolor, *Ostrea* – Hanley, 1846b: 107; 1854: pl. 1, fig. 2; 1856a: 305. “Senegal?”; Cuming & Hanley colls. Cited as a synonym of the west African *Crassostrea parasitica* (Gmelin, 1791) by Inaba et al. (2004: 20–21). Huber (2010: 180, 609) regarded Gmelin’s species to be a *nomen dubium* and Hanley’s taxon to be a synonym of *Crassostrea tulipa* (Lamarck, 1819). NHMUK 1912.6.4.2, figured syntype (72.7 mm x 59.9 mm) (Hanley’s description referred to “the few specimens,” so this is not a holotype).

callichroa, *Ostrea* – Hanley, 1846b: 107; 1856a: 305–306. Isla Chiloe, Chile; low-water, on rocks; H. Cuming; Cuming coll. Synonym of the Chilean *Tiostrea chilensis* (Philippi, 1844) (Inaba et al., 2004: 45–46, as Philippi, “1846”). More recently, Beu (2006: 210) and Huber (2010: 607) regarded *Tiostrea* as a synonym of *Ostrea*. Type material not found in NHMUK or Leeds Museum in 2012.

chemnitzii, *Ostrea* – Hanley, 1846b: 106; 1856a: 304–305. “China?”; Cuming & Hanley colls. Also cited Chemnitz (1786: pl. 116, fig. 994). Synonym of the Indo-Pacific *Dendrostrea rosacea* (Deshayes, 1836) (Inaba et al., 2004: 57–58). NHMUK 1912.6.4.1, syntype (figured by G. B. Sowerby II, 1871: 18, pl. 20, fig. 47b); NHMUK 1907.12.30.5, syntype (figured by G. B. Sowerby II, 1871: 18, pl. 20, fig. 47a); Leeds Museum 1957.173.24635, syntype (67.4 mm x 47.0 mm). Higo et al. (2001: 155, fig. B395s) illustrated the NHMUK type material and noted that these specimens may represent two species.

columbiensis, *Ostrea – Hanley, 1846b: 107; 1856a: 305. Santa Elena, West Colombia [now Guayas, Ecuador], half-tide, on rocks; H. Cuming; Cuming coll. The tropical eastern

Pacific *Crassostrea columbiensis* (Hanley, 1846) (Coan & Valentich-Scott, 2012: 239–240). SBMNH 120192, neotype (Coan & Valentich-Scott, 2012).

iridescens, *Ostrea* – Hanley, 1854: pl. 2, figs. 6, 7, ex Gray ms. Synonym of the eastern Pacific *Striostrea prismatica* (Gray, 1825) (Coan & Valentich-Scott, 2012: 243). NHMUK 1912.6.18.40, syntype.

lacerata, *Ostrea* – Hanley, 1846b: 106; Hanley, 1856a: 305, as “*O. lacerans*”. “Senegal?”; Cuming & Petit [de la Saussaye] colls. *Non* *O. lacerata* Goldfuss, 1833. The west African *Crassostrea lacerata* (Hanley, 1846) according to Inaba et al. (2004: 20–21), but it would have to be renamed as it is a junior homonym. However, Huber (2010: 613–614) considered it to be a synonym of the west African *Dendostrea senegalensis* (Gmelin, 1791). NHMUK 20080620, syntype (Senegal, Cuming collection) (49.0 mm x 40.1 mm) (as Hanley referred to multiple “specimens,” this is not a holotype).

megodon, *Ostrea – Hanley, 1846b: 106; Hanley, 1856a: 309. Peru; H. Cuming; Cuming coll. The tropical eastern Pacific *Ostrea megodon* Hanley, 1846 (Inaba et al., 2004: 41–42) or now preferably *Undulostrea megodon* (Hanley, 1846) (Coan & Valentich-Scott, 2012: 237–238). *Ostrea megodon* Hanley, 1846, is the type species of *Undulostrea* Harry, 1985, by original designation. NHMUK 20120168, four syntypes (four specimens comprising seven valves).

multistriata, *Ostrea* – Hanley, 1846b: 106; 1854: *Ostrea* pl. 1, fig. 3; 1856a: 305. Coast of Africa; Cuming, Hanley & Saul colls. *Non* *O. multistriata* Poli, 1795, *non* *O. multistriata* Deshayes, 1832. Renamed *Ostrea procellosa* Lamy, 1929 (pp. 71–72), ex Valenciennes ms. Synonym of the west African *Striostrea margaritacea* (Lamarck, 1819) (Inaba et al., 2004: 32, who placed this species in *Saccostrea*). *Ostrea procellosa* is the type species of *Striostrea* Vialov, 1936, by original designation (Stenzel, 1971: 1135–1138; Huber, 2010: 181). NHMUK 1907.12.30.335, figured syntype (60.6 mm x 55.1 mm); Leeds Museum 1957.173.24636, syntype (74.8 mm x 73.2 mm).

pestigris, *Ostrea – Hanley, 1846b: 106–107; 1856a: 309–310, both as “*pes-tigris*”; Luzon, Philippine Islands; H. Cuming; Cuming & Walton colls. The southwestern Pacific *Planostrea pestigris* (Hanley, 1846) (Hylleberg & Kilburn, 2003: 163; Inaba et al., 2004: 43–44). *Ostrea pestigris* Hanley, 1846, is the type species

of *Planostrea* Harry, 1985, by original designation. NHMUK 1907.12.30.333, possible syntype (figured in G. B. Sowerby II, 1871: pl. 30, fig. 78a, 78b; Higo et al., 2001: 155, fig. B406). Lam & Morton (2004: 21; 2009: 487) incorrectly stated that USNM 666809 was the “holotype” of this species; however, USNM 666809 is merely a specimen from Borneo that was illustrated by Harry (1985: 143, fig. 22).

“**purpurea?**”, *Ostrea edulis* var. – Hanley, 1854: *Ostrea*, pl. 2, fig. 8; 1856a: 296. Toulon, France; presumably Hanley coll. Homonym of *Ostrea purpurea* Lightfoot, 1786. Synonym of *Ostrea edulis* Linnaeus, 1758 (Inaba et al., 2004: 33–36). NHMUK 1912.6.18.42, figured holotype (87.7 mm x 78.4 mm).

terebratuliformis, *Ostrea cucullata* var. – Hanley, 1856a: 306 (footnote). No loc. stated. No type specimen has been located, and the species was unfigured. While it was listed as a synonym of the Indian Ocean *Saccostrea forskali* (Gmelin, 1791) by Inaba et al. (2004: 29–30), it is best considered a *nomen dubium* (Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

Unionidae

angustior, *Unio generosus* var. – Hanley & Theobald, 1872: 22, pl. 46, fig. 7. Pegu. Listed as a synonym of the Burmese *Lamellidens generosus* (Gould, 1847) in the freshwater mussel database: <http://mussel-project.ua.edu>. NHMUK 1968655, figured syntype (77.0 mm x 44.2 mm) (Johnson, 1971: 79, as “holotype”).

***ascia**, *Unio* – Hanley, 1856a: 385, 22 (pl. expl.), pl. 23, fig. 20, ex Benson ms. Penang. See also Prashad (1932b: 174–176). Haas (1910–1920) did not include this taxon. Haas (1969a: 99) listed it as *Contradens ascia*. Brandt (1974: 289–290, 392, pl. 24, fig. 49) recognized it as a subspecies, *Uniandra contradens ascia* (Hanley, 1856), noting the priority of *Uniandra* Haas, 1912, over *Contradens* Haas, 1913. This subspecies occurs in Penang, Malaysia. MCZ 17046, lectotype (57.3 mm x 34.3 mm) (selected by Johnson, 1956: 106, pl. 2, fig. 2).

aurea, *Unio indicus* var. – Hanley & Theobald, 1874: 43, pl. 107, fig. 4, ex G. B. Sowerby II ms. Nerbudda River. *Non Unio aureus* Lea, 1859. Presumed synonym of *Parreysia rajahensis* (Lea, 1841), which occurs the

Narmada Basin, west-central India (Simpson, 1900: 844; Preston, 1915: 169; Haas, 1969a: 124–125). Type material not found in NHMUK or Leeds Museum in 2012.

***corbis**, *Unio* – Hanley, 1856a: 386, 22 (pl. expl.), pl. 23, fig. 43, ex Benson ms; Hanley & Theobald, 1872: 22, pl. 45, fig. 10. Assam. *Parreysia corbis* (Hanley, 1856) from northeastern India (Prashad, 1932b: 176–177; Haas, 1969a: 121; Subba Rao, 1989; Ramakrishna & Dey, 2007: 295). Type material not found in NHMUK or Leeds Museum in 2012. Ramakrishna & Dey (2007: 295) erroneously stated: “Type location: Natural History Museum, London.”

cylindrica, *Unio marginalis* var. – Hanley & Theobald, 1872: 20, pl. 44, fig. 1. No locality provided. Synonym of *Lamellidens marginalis* (Lamarck, 1819) (Preston, 1915: 17), which is widespread in India, Sri Lanka, Bangladesh and Burma. Type material not found in NHMUK or Leeds Museum in 2012.

fragilis, *Unio corrugatus* var. – Hanley & Theobald, 1872: 21, pl. 45, fig. 4. Ex pisces? *Non U. fragilis* Rafinesque, 1820. Junior synonym of *Parreysia corrugata* (Müller, 1774) (Preston, 1915: 156), which is widespread in India, Bangladesh and Nepal. NHMUK 1968651, figured syntype (41.1 mm x 29.9 mm) (Johnson, 1971: 84, as “holotype” but the original description indicated more than one specimen).

***involutus**, *Unio* – Hanley, 1856a: 385, 22 (pl. expl.), pl. 23, fig. 19, ex Benson ms; Hanley & Theobald, 1872: 19, pl. 41, fig. 2. Assam. Haas (1969a) used *Radiatula* as a valid genus, but Haas (1969b), Subba Rao (1989) and Ramakrishna & Dey (2007: 319) ranked it as a subgenus of *Parreysia*. The first phylogenetic analysis including this group supports recognizing *Radiatula* as a valid genus separate from *Parreysia* (Whelan et al. 2011). Thus: *Radiatula involuta* (Hanley, 1856), which occurs in northeastern India and Bangladesh. NHMUK 1968656, holotype (43.0 mm x 29.5 mm) (Johnson, 1971: 86).

obesa, *Unio marginalis* var. – Hanley & Theobald, 1872: 20, pl. 43, fig. 3. Irawadi River, Birmah. *Non Unio obesa* Lea, 1831. Preston (1915: 176) placed it as a synonym of *Lamellidens marginalis* (Lamarck, 1819). However, it has been treated as a subspecies of *Lamellidens jenkinsianus* (Benson, 1862) from northeastern India, Bangladesh and Burma (Subba Rao, 1989: 167; Ramakrishna & Dey, 2007: 287–288). If it continues to be

retained as a subspecies, a replacement name will be needed. NHMUK 1907.12.30.46, holotype (Johnson, 1971: 89).

radula, *Unio* – Hanley, 1856a: 382, 22 (pl. expl.), pl. 23, fig. 41, ex Benson ms; Hanley & Theobald, 1870: 5, pl. 10, fig. 3 (holotype, as “Benson’s unique type”). Assam. *Non Unio radula* Say, 1829. Renamed *Nodularia (Radiatula) lima* Simpson, 1900: 820. Haas (1969a:112) also used *Radiatula lima* (Simpson, 1900). Subba Rao (1989: 190) and Ramakrishna & Dey (2007: 321) recognized *Parreysia (Radiatula) lima* (Simpson, 1900), but did not include *radula* in their synonymies. Assuming that *Radiatula* is a full genus (see remarks under *Unio involutus*), the valid name of this species would be *Radiatula lima* (Simpson, 1900), which occurs in northeastern India and Nepal. Ramakrishna & Dey (2007: 321) erroneously stated “Type location: USNM,” but the type material is that of Hanley, as Simpson merely renamed a junior homonym. Type material not found in NHMUK or Leeds Museum in 2012.

scobina, *Unio* – Hanley, 1856a: 382, 22 (pl. expl.), pl. 23, fig. 40, ex Benson ms; Hanley & Theobald, 1876: 22, pl. 46, figs. 2, 3. Assam. This taxon was overlooked by Haas (1969a) and Brandt (1974), but treated as a junior synonym of *Scabies crispata* (Gould, 1843) by Subba Rao (1989:193) and Ramakrishna & Dey (2007: 277–278), which is widespread from China through Indochina and India. Type material not found in NHMUK or Leeds Museum in 2012.

solida, *Unio corrugatus* var. – Hanley & Theobald, 1872: 21, pl. 45, fig. 2. Godavery River. *Non Unio solidus* Lea, 1838. Junior synonym of *Parreysia corrugata* (Müller, 1774), which is widespread in India, Bangladesh and Nepal (Haas, 1969a: 118). Type material not found in NHMUK or Leeds Museum in 2012.

tennentii, *Unio* – Hanley, in Hanley & Theobald, 1872: 22, pl. 45, figs. 7–9. This species was in part based on the image of *Mya corrugata* Müller, 1774, in Wood (1815: pl. 24, figs. 1–3), but it is also clear that Hanley had a Benson specimen from “British India”. It was not intended as a renaming of a homonym, as it has been interpreted by some workers. Preston (1915: 155) and Haas (1969a:118) both listed it as a junior synonym of *Parreysia corrugata* (Müller, 1774), which is widespread in India and Bangladesh as well as Nepal. Not listed by either Subba Rao (1989) or Ramakrishna

& Dey (2007). NHMUK 1907.12.30.58, syn-type (31.0 mm x 22.2 mm) (not mentioned by Johnson, 1971: 95).

trirostris, *Unio* – Hanley, 1863b: *Unio* pl. 2, fig. 9; Hanley & Theobald, 1870: 6, pl. 11, fig. 6. Hindostan (Hanley, 1863b); Moradabad (Hanley & Theobald, 1870). *Unio trirostris* “Musgrave” [Hanley’s photographer] was listed by Simpson (1900: 842; 1914: 1110), Preston (1915: 158–159), and Haas (1969a: 119) as a synonym of *Parreysia favidens* (Benson, 1862), which is widespread in India and Bangladesh, as well as Nepal. Not mentioned by either Subba Rao (1989) or Ramakrishna & Dey (2007). NHMUK 1907.12.30.45, holotype (63.0 mm x 43.1 mm) (Johnson, 1971: 96).

typica, *Unio marginalis* var. – Hanley & Theobald, 1872: 20, pl. 43, fig. 2. Moradabad, Pegu. Listed as synonym of *Lamellidens marginalis* (Lamarck, 1819), which is widespread in India, Sri Lanka, Bangladesh and Burma in the freshwater mussel database: <http://mussel-project.ua.edu>. Type material not found in NHMUK or Leeds Museum in 2012.

velaris, *Unio* – Hanley, 1856a: 385–386, 22 (pl. expl.), pl. 23, fig. 42, ex Benson ms. Bugis, Celebes; Assam, India. However, Hanley & Theobald (1876: 62) subsequently noted that the Indian locality was incorrect, overlooked by Prashad (1932b: 177–178). Haas (1910: 289; 1969a: 990) listed *velaris* as a junior synonym of *Physunio superbus* (Lea, 1843), which occurs in Thailand, the Malay Peninsula, Java and Sumatra. Brandt (1974: 294–295, 394, pl. 25, fig. 57) also did so, but tentatively. *Unio velaris* Hanley, 1856, is the type species of *Velunio* Haas, 1914, by original designation. Type material not found in NHMUK or Leeds Museum in 2012.

vulcanus, *Unio – Hanley, 1876: 606–607; Hanley & Theobald, 1876: 62, pl. 155, fig. 3. Birmah, vel Pegu; Hanley coll. Simpson (1900, 1914), Haas (1969a) and Brandt (1974) treated this species as *Parreysia vulcanus* (Hanley, 1876). Others have regarded it as a synonym of *Parreysia burmana* (Blanford, 1869), which occurs in the Irrawaddy and Salween rivers of Burma and adjacent Thailand, but possibly a separate species (Brandt, 1974: 280). NHMUK 1900.3.19.20, holotype (32.0 mm x 24.9 mm) (Johnson, 1971: 97).

walpolei, *Monocondylaea – Hanley, 1871: 587–588. Sawawak, Borneo; ex Geale coll.; Hanley coll. Haas (1910: pl. 41, fig. 7) and Simpson (1914: 1096) listed it as a valid

species, *Pseudodon walpolei* (Hanley, 1871), which occurs in Borneo (Haas, 1969a: 131). MCZ 175577, lectotype (43.7 mm x 27.9 mm) (selected by Johnson, 1948: 48–50, pl. 2, fig. 2); NHMUK 1871.7.11.1, paralectotype (51.0 mm x 30.3 mm) (Johnson, 1971: 97).

zonata, *Unio marginalis* var. – Hanley & Theobald, 1872: 20, pl. 44, fig. 2. Belgaum, Deccan, India. Preston (1915: 177) retained this as a variety of *Lamellidens marginalis* (Lamarck, 1819). However, it is now regarded as a synonym of *L. scutum* (G. B. Sowerby II, 1868), which occurs in Tenasserim, Burma (Subba Rao, 1989: 169). NHMUK 1907.10.28.252, figured syntype (57.8 mm x 32.4 mm) (Johnson, 1971: 97, as “holotype”).

bhamaoensis, *Unio* – “Hanley & Theobald”, 1876: 62. Spelling error for *Unio bhamoensis* Theobald, 1873.

birmanus, *Unio* – “Hanley & Theobald”, 1870: 19. Spelling error for *Unio burmanus* Blandford, 1869.

candaharicus, *Unio marginalis* – “Hanley & Theobald”, 1872: 20, pl. 43, fig. 4. This species has been listed by some authors as a Hanley & Theobald name, but it was proposed by Hutton (1850: 660).

inornatus, *Unio* – “Hanley ms”. In his section of the *Conchologia Iconica* monograph on *Unio*, Reeve (1865: pl. 29, fig. 147) indicated that this species was a Hanley manuscript name; the Errata to this monograph by G. B. Sowerby II (1868), indicated that this species name should have been credited to Lea, 1856. It was additionally a misidentification, as the figured specimen actually was *Contradens contradens* (Lea, 1838).

mandelayanus, *Unio* – Hanley & Theobald, 1876: 62. Spelling error for *Unio mandelayensis* Theobald, 1873.

Mulleriidae

bensonianus, *Mycetopus* – Hanley & Theobald, 1876: v. *Nomen novum pro Anodonta soleniformis* Benson, 1836, *non Unio soleniformis* Lea, 1831, and *non Mycetopoda soleniformis* d’Orbigny, 1835. An unnecessary replacement name, since the replacement name *Margaron* (*Unio*) *bensonii* Lea, 1870, had already been supplied for Benson’s name. This Indian species is now known as *Solenaia soleniformis* (Benson, 1836), the species taxa involved

all now referred to different genera and the replacement names not having gained acceptance (Bogan, in press; ICZN Code Art. 59.3).

Lucinidae

philippinarum, *Lucina* – “Hanley”. This species was described by Reeve (1850: pl. 4, fig. 18a, b) and credited to “Hanley, Species of Shells”, but it did not appear in Hanley’s text until 1856 (Hanley, 1856a: 348), in which he cited Reeve’s monograph. This Reeve species, ex Hanley ms, is now regarded as a synonym of *Austriella corrugata* (Deshayes, 1843) (Glover et al., 2008: 27–29).

Astartidae

latisulca, *Crassina* – Hanley, 1843b: 87 (footnote); 1844g: pl. 14, fig. 35; 1846c: 9 (pl. expl.). North America. Synonym of northwestern Atlantic *Astarte undata* Gould, 1841 (E. A. Smith, 1881: 206; Dall, 1903: 938). Leeds Museum 1957.173.602, possible syntype (33.7 mm x 28.6 mm (same size as Hanley’s measurements, but with more ribs than the figured specimen)).

Chamidae

bonanni, *Chama arcinella* – Hanley, 1885b: 292. “Brazil? Zanzibar?”; Hanley coll., ex Belcher coll. Hanley was ambivalent as to whether this was a variety of *C. arcinella* or a separate species, so he listed it both ways. Indeterminate (Nicol, 1952: 810, as “*C. bonanni*”). Type material not found in NHMUK or Leeds Museum in 2012.

Cyrenoididae

Cyrenoidea – Hanley, 1846c: 10 (pl. expl.). Invalid emendation of *Cyrenoida* Joannis, 1835.

Galeommatidae

Galeomna – “Hanley”, 1843b: 59. Error pro *Galeomma* Turton, 1825.

Lasaeidae

coquimbensis, *Montacuta – Hanley, 1857: 340. Coquimbo, Chile; 6 fms. [11 m], fine sand; H. Cuming. *Mysella coquimbensis* (Hanley,

1857) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1967992, five syntypes.

***mactroides, Pythina** – Hanley, 1857: 340. Cape of Good Hope, South Africa. *Pythina mactroides* Hanley, 1857 (Barnard, 1964: 486–487); *Melliteryx mactroides* (Hanley, 1857) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1967994, four syntypes.

***nuculoides, Pythina** – Hanley, 1857: 341. Huacna, Society Islands; H. Cuming. *Lionelita nuculoides* (Hanley, 1857) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 20120170, 1 syntype (10.2 mm x 8.2 mm).

***tellinoides, Kellia** – Hanley, 1857: 340. Baclayon, Bohol, Philippine Islands; under stones; H. Cuming collection. NHMUK 1967993, three syntypes.

Cyrenidae

cochinensis, Cyrena – Hanley, 1859a: 543; 1863b: pl. 7, fig. 2. Cochin [Kochi], India; Hanley coll., from M'Andrew. *Villorita cyprinoides* var. *cochinensis* (Hanley, 1856) (Satyamurti, 1960: 151–152); synonym of the southwestern Indian *Villorita cyprinoides* (Gray, 1825) (Huber, pers. comm., 13 May 2012). Type material not found in NHMUK or Leeds Museum in 2012. MCZ 119016 (Madras Coast, India), is catalogued as “cotypes” but these are only specimens “identified by Hanley” (Prime, 1895: 19), neither specified as from Cochin or from the M'Andrew collection (Johnson, 1959: 447, as “idiotypes”).

***iravadica, Corbicula** – Hanley & Theobald, 1876: 62, pl. 155, fig. 8, ex Blanford ms; Blanford, 1881: 221. Irrawaddy River, Pegu and Ava, Myanmar. A valid species of *Corbicula* (Prashad, 1928: 25–26, pl. 4, figs. 7–10; Brandt, 1974: 323, 400, pl. 28, fig. 91). NHMUK 1907.12.30.406, probable holotype (11.8 mm x 10.0 mm).

***philippinarum, Cyrena** – Hanley, 1844g: 10 (pl. expl.), pl. 14, fig. 60; 1845b: 159–160; 1856a: 351–352. Philippine Islands; Cuming & Hanley colls. *Batissa philippinarum* (Hanley, 1844) (Prime, 1869: 139). NHMUK 1842.5.10.1513, figured syntype (106.3 mm x 119.3 mm).

pisum, Corbicula – Hanley & Theobald, 1876: 62, *nomen nudum*, in synonymy with *C. iravadica* Hanley & Theobald, 1876, ex Blanford ms.

***placens, Cyrena** – Hanley, 1844g: 10 (pl. expl.), pl. 14, fig. 52; 1845b: 160; 1856a: 352. Honduras (Hanley, 1856a); Hanley coll. &

“Jardin des Plantes” [MNHN, but not extant, V. Héros, pers. commun., 15 Oct. 2012]. As *Cyanocyclas placens* (Hanley, 1844), probably from South America (Simone, 2006: 298: fig. 1043, syntype); *Polymesoda placens* (Hanley, 1844) from Central America (Abbott & Dance, 1982: 352). NHMUK 1907.10.28.3, syntype (37.5 mm x 42.2 mm).

***radiata, Cyrena** – Hanley, 1845b: 159; 1863b: pl. 7, fig. 4. Central America; Cuming, Hanley & G. B. Sowerby II colls.; probably collected by H. Cuming. The tropical eastern Pacific *Polymesoda radiata* (Hanley, 1845) (Coan & Valentich-Scott, 2012: 472–474). NHMUK 1907.10.28.5, syntype; NHMUK 1992127, 2 syntypes; MCZ 176946, 2 syntypes (36.5 mm x 33.0 mm; 34.5 mm x 33.4 mm) (Johnson, 1959: 468). MCZ 176947 was catalogued as “cotypes” or “idiotypes” but this lot appears to be merely specimens later “identified by Hanley” (Prime, 1895: 21).

sordida, Cyrena – Hanley, 1844g: 10 (pl. expl.), pl. 14, fig. 51; 1845b: 159; 1856a: 352. North America (1845b); “Florida?” (1856a); Hanley coll. Prime (1869: 148) stated that this species was from Central America. M. Huber (pers. comm., 20 Dec. 2011), following notes by J. P. E. Morrison, considers this to be a synonym of the western Atlantic *Polymesoda carolinina* (Bosc, 1801). *Cyrena sordida* Hanley, 1844, is the type species of *Americana* Clessin, 1879, by the subsequent designation of Morrison (1959). NHMUK 1907.10.28.4, holotype (36.3 mm x 39.1 mm).

tennentii, Cyrena – Hanley, 1858a: 23–24; 1859c: 237. Ariho River, Taprobana [Sri Lanka]; “below the great stone dam”. *Cyrena tennentii* Hanley, 1858 (Preston, 1915: 329; Prashad, 1921: 142, pl. 20, fig. 10). Synonym of *Geloina coaxans* (Gmelin, 1791) (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

cashmirensis, Corbicula – “Hanley & Theobald”, 1875: 55. Spelling error for *C. cashmiriensis* Deshayes, 1855 (Prashad, 1928: 20).

Glaucnomidae

***rugosa, Glaucnoma** – Hanley, 1843f: 2 (Syst. List, as “rogosus”), 3 (pl. expl., as *rugosus*); 1843g: pl. 10, fig. 24; 1846c: 3 (pl. expl., as *rugosus*); 1856a: 337, as *rugosa*; Manila, Philippine Islands. This species be-

came available when plate 10 was published, providing a figure to go with the plate explanation published earlier. *Glaucanome rugosa* Hanley, 1843, from the Philippine Islands and Australia (Huber, 2010: 435). NHMUK 20110079, three possible syntypes.

curta, *Glaucanome* – “Hanley”. Reeve, 1844: pl. 1, fig. 7; Hanley, 1844g: pl. 15, fig. 41 (without caption); 1846c: 10 (pl. expl.); 1856a: 337. Philippine Islands (1856a). Hanley (1856a: 337) indicated this as being his species, but Reeve’s account in the *Conchologia Iconica* was published in April 1844, well before Hanley’s 1846 plate caption appeared.

virens, *Glaucanome* – “Hanley”, 1844c: 18. Listed by Norris & Dance (2002: 375) as being a Hanley species, this is *Solen virens* Linnaeus, 1767, as indicated by Hanley.

Tellinidae

****acuminatus*, *Tellinides*** – Hanley, 1843b: 73–74; 1843f: 8 (pl. expl.); 1843g: pl. 13, fig. 53; 1846a: 294–295, 331, pl. 60, fig. 141, as *Tellina* (*Tellinides*) *acuminata*. No loc. stated; British Museum. Réunion (Deshayes, 1863: 11). *Omala* (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 20120175, syntype (figured valve is broken; other valve 47.8 mm x 27.7 mm).

****ala*, *Tellina*** – Hanley, 1845a: 165; 1846a: 311, 331, pl. 60, figs. 137, 146; 1859c: 236. “Ceylon?” [Sri Lanka]; Cuming, Hanley & Metcalfe colls. Dey (2006: 69–70, pl. 32, fig. 1, pl. 35, fig. 6, as “*Macoma* (*Psammotreta*) *ala* (Hanley, 1844)”; Hylleberg & Kilburn (2002: 68 as “*Arcopagia*”). *Tellina*, s.l. (M. Huber, pers. comm., 13 May 2012). Type material not found in NHMUK or Leeds Museum in 2012.

****ancilla*, *Tellina*** – Hanley, 1844f: 148; 1846a: 304, 331, pl. 58, fig. 94. Lord Hood’s Island [Marutea, Tuamotus]; fine coral sand; H. Cuming. NHMUK 20120176/1, lectotype (selected by Salisbury, 1934: pl. 11, fig. 5, as “holotype”) (24.2 mm x 20.2 mm); NHMUK 20120176/2, paralectotype. *Tellina* s.l., from Philippine Islands (M. Huber, pers. comm., 2 Sept. 2012).

****asperrima*, *Tellina*** – Hanley, 1844d: 59–60; 1846a: 226–227, 331, pl. 60, fig. 135. Sual, Pangasinan, Luzon, Philippine Islands; 6 fms. [11 m], sandy mud; H. Cuming. The Indo-Pacific *Tellina* (*Tellinella*) *asperrima* Hanley,

1844 (Poppe & Langleit, 2011: pl. 1154, figs. 5–7). Synonym of *Scutarcopagia pulcherrima* (G. B. Sowerby I, 1825) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1996472, possible syntype (this lot has two specimens, while the original description refers to the “unique specimen,” so one of the two specimens may have been subsequently added to this lot) (Higo et al., 2001: 169, fig. B916).

****assimilis*, *Tellina*** – Hanley, 1844f: 144; 1846a: 302–303, 331, pl. 58, fig. 95. Luzon [Philippine Islands]; 6 fms. [11 m], sandy mud; H. Cuming. Xu et al. (2008: 193, fig. 600), as *Exotica assimilis* (Hanley, 1844). *Tellina*, s.l. (Huber, pers. comm., May 13, 2012). Type material not found in NHMUK or Leeds Museum in 2012. NHMUK 1874.12.11.322 was figured by G. B. Sowerby II (1867: pl. 34, fig. 191), from the Lombe Taylor collection is conspecific, but is not a type specimen.

****aurora*, *Tellina*** – Hanley, 1844f: 147; 1846a: 301, 331, pl. 58, fig. 76. Panama; 10 fms. [18 m], soft sandy mud; H. Cuming. The tropical eastern Pacific *Psammotreta* (*Psammotreta*) *aurora* (Hanley, 1844) (Coan & Valentich-Scott, 2012: 612–613). *Tellina aurora* Hanley, 1844, is the type species of *Psammotreta* Dall, 1900, by original designation. NHMNK 1990045/1, lectotype (27.6 mm x 17.2 mm) (selected by Salisbury, 1934: pl. 11, fig. 4); NHMUK 1990045/2, paralectotype; Leeds Museum 1957.173.172, two possible paralectotypes (larger is 30.3 mm x 18.3 mm).

****bruguieri*, *Tellina*** – Hanley, 1844f: 142; 1846a: 321–322, 332, pl. 62, fig. 192. Ilo-Ilo, Panhay [Philippine Islands]; hard sand; H. Cuming. In 1846a, Hanley also cited Bruguère (1797: pl. 231, fig. 2). The western Pacific *Macalia bruguieri* (Hanley, 1844) (Hylleberg & Kilburn, 2002: 68; 2003: 199; Wang, 2004b: 284, pl. 156, fig. N; Poppe & Langleit, 2011: pl. 1165, fig. 2). *Tellina bruguieri* Hanley, 1844, is the type species of both *Macalia* H. Adams, 1861, by monotypy, and of *Tellinungula* Römer, 1873, by monotypy, so that the latter is an objective junior synonym of the former. NHMUK 1976133, two syntypes (figured syntype 43.0 mm x 37.2 mm) (Higo et al., 2001: 171, fig. B1003); Leeds Museum 1957.173.24642, one syntype (37.9 mm x 33.7 mm).

****carnicolor*, *Tellina*** – Hanley, 1846a: 263, pl. 56, fig. 15, *nom. nov. pro T. incarnata* Hanley, 1844, *non T. incarnata* Linnaeus. The Indo-Pacific *Clathrotellina carnicolor* (Hanley, 1846) (Higo et al., 2001: 170, fig.

- B938, syntype; Hylleberg & Kilburn, 2003: 198). NHMUK 1874.12.11.338, figured syntype (19.2 x 16.3 mm); Leeds Museum 1957.173.1864, two possible syntypes (33.4 mm x 18.8 mm; 31.7 mm x 19.3 mm) (the size of the Leeds specimens is large for this species).
- ***casta, *Tellina*** – Hanley, 1844d: 63; 1846a: 253, 330, pl. 56, fig. 9. Singapore; sandy mud; H. Cuming. The Indo-Pacific *Arcopella casta* (Hanley, 1844) (Lyngé, 1909: 193; Hylleberg & Kilburn, 2003: 197–198; Wang, 2004b: 280, pl. 154, fig. G), or *Arcopagia casta* (Hanley, 1844) (Dey, 2006: 57–58, pl. 24, figs. 2, 3, pl. 27, fig. 5). *Abranda* (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 1976123, 4 syntypes (seven valves; largest valve is the figured specimen, 12.4 mm x 9.9 mm).
- ***chinensis, *Tellina*** – Hanley, 1845a: 165; 1846a: 326–327, 330, pl. 56, fig. 18. China; British Museum coll. *Tellinides chinensis* (Hanley, 1845) (Wang, 2004b: 277, pl. 152, fig. I, as “1844”); however, M. Huber (pers. comm. 2 Sept. 2012) concluded that its locality and status are unresolved, and it probably belongs close to *Macoma* because of its lack of lateral teeth. This would leave the Chinese tellinid without an available name. NHMUK 1843.11.23.60, holotype (24.6 mm x 16.6 mm).
- ***columbiensis, *Tellina*** – Hanley, 1844d: 71; 1846a: 307, 333, pl. 65, fig. 246. Monte Christi, West Colombia [Ecuador]; 12 fms. [22 m], sandy mud; H. Cuming. The tropical eastern Pacific *Psammotreta (Psammotreta) columbiensis* (Hanley, 1844) (Coan & Valentich-Scott, 2012: 613–614). *Tellina columbiensis* Hanley, 1844, is the type species of *Ardeamya* Olson, 1961, by original designation. NHMUK 1966548, 2 syntypes (two valves that do not match; 51.2 mm x 28.1 mm and 53.4 mm x 28.9 mm); Leeds Museum 1957.173.173, one syntype (56.1 mm x 30.9 mm). Hanley (1844d) gave the size of this species as 3 inches by 1.7 inches [= c. 75 mm x 43 mm], which is somewhat larger than any of these three syntypes.
- ***conspicua, *Tellina*** – Hanley, 1846a: 293, pl. 58, fig. 100. Loc. not stated; Cuming coll. *Tellinides conspicuus* (Hanley, 1846) from Indonesia (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.
- ***corbuloides, *Tellina*** – Hanley, 1844d: 70; 1846a: 280–281, 330, pl. 57, figs. 50, 57. Catbalonga, Samar [Philippine Islands]; 10 fms. [18 m], soft mud; H. Cuming. *Non T. corbuloides* F. A. Römer, 1836. The western Indo-Pacific *Tellina (Angulus) corbuloides* Hanley, 1844 (Lyngé, 1909: 201–202), but this species requires the use of a synonym or renaming if it is recognized as valid. NHMUK 1976130, two syntypes (specimen figured in fig. 57 is 32.3 mm x 21.7 mm).
- ***culter, *Tellina*** – Hanley, 1844d: 69–70; 1846a: 279–280, 330, pl. 57, fig. 51. Cagayan, Misamis, Mindanao [Philippine Islands]; 25 fms. [46 m], sandy mud; H. Cuming. The western Pacific *Moerella culter* (Hanley, 1844) (Hylleberg & Kilburn, 2003: 200; Wang, 2004b: 285, pl. 156, fig. B, with *Moerella* as full genus; Poppe & Langleit, 2011: pl. 1158, fig. 10). Not a *Moerella*, but rather *Tellina*, s.l. (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 2012084, three possible syntypes.
- ***cumingii, *Tellina*** – Hanley, 1844d: 59; 1846a: 223, 331, pl. 58, fig. 72. Guacomayo, Central America [possibly on eastern shore of the Golfo de Montijo, Panama – Coan, 2011]; coral sand; H. Cuming. The tropical eastern Pacific *Tellina (Tellinella) cumingii* Hanley, 1844 (Coan & Valentich-Scott, 2012: 656, 658). NHMUK 20120177, syntype (35.1 mm x 15.7 mm).
- ***cuspis, *Tellina*** – Hanley, 1844d: 72; 1846a: 309–310, 331, pl. 59, fig. 125. Loc. unknown; Cuming, Walton & Metcalfe colls. A valid *Tellina*, s.l., from Indonesia and/or Philippines (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 20120178, figured syntype (33.3 mm x 22.2 mm).
- ***cycladiformis, *Tellina*** – Hanley, 1844d: 70; 1846a: 277–278, 330, pl. 57, fig. 61. San Nicolas, Zebu [Philippine Islands]; H. Cuming. *Macoma cycladiformis* (Hanley, 1844) from the Philippine Islands (Poppe & Langleit, 2011: pl. 1165, figs. 5, 6). *Pinguitellina cycladiformis* (Hanley, 1844) from the Philippine Islands (M. Huber, pers. comm., 13 May 2012). Type material not found in NHMUK or Leeds Museum in 2012.
- ***cygnus, *Tellina*** – Hanley, 1844f: 144; 1846a: 310–311, 331, pl. 59, fig. 122. Bias, Negros [Philippine Islands]; 7 fms. [13 m], coral sand; H. Cuming. The western Indo-Pacific *Tellina cygnus* Hanley, 1844 (Scott, 1994: 86–87, pl. 12, fig. 1A; Hylleberg & Kilburn, 2003: 202). NHMUK 1874.12.11.373, syntype (13.4 mm x 8.7 mm) (Simone & Wilkinson, 2008: 175, fig. 53–55, as the “probable holotype/syntype” of *Pinguimacoma cygnus*).
- ***cyrenoidea, *Tellina*** – Hanley, 1844d: 64; 1846a: 258, 330, pl. 56, fig. 31. St. Nicolas, Zebu, Philippine Islands; low water, sandy

mud; H. Cuming. The Indo-Pacific *Strigilla* (*Aeretica*) *cyrenoidea* (Hanley, 1844) (M. Huber, pers. comm., 13 May 2012). NHMUK 20120179, three syntypes (figured syntype is 16.6 mm x 15.5 mm). Salisbury (1934: pl. 13, fig. 2) illustrated the “holotype,” but his figure is of another species.

deshayesii, *Tellina – Hanley, 1844f: 148; 1846a: 223, 330, pl. 57, fig. 66 (as “96” on p. 330). “Red Sea?”; Cuming & Deshayes colls. *Dallitellina deshayesii* (Hanley, 1844) from southeast Asia (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 20120180, two syntypes (figured syntype, 38.9 mm x 14.9 mm; other syntype, 44.1 mm x 16.4 mm).

diana, *Tellina – Hanley, 1844f: 147–148. “Java?”; Hanley coll. Synonym of *Psammacoma candida* (Lamarck, 1818), and from China, not Java (M. Huber, pers. comm., 2 Sept. 2012).

discus, *Tellina – Hanley, 1844d: 63–64; 1846a: 257–258, 333, pl. 64, figs. 228, 232. Mindanao [Philippine Islands]; coarse sand, on reefs; H. Cuming. *Cyclotellina discus* (Hanley, 1844) from the Philippine Islands (Poppe & Langleit, 2011: pl. 1162, figs. 1, 2). Type material not found in NHMUK or Leeds Museum in 2012.

dombei, *Tellina – Hanley, 1844f: 144; 1846a: 323–324, 332, pl. 62, fig. 182, 333, pl. 64, fig. 222. Panama; 12 fms. [22 m], sandy mud; H. Cuming. The tropical eastern Pacific *Psammotreta* (*Leporimetis*) *dombei* (Hanley, 1844) (Coan & Valentich-Scott, 2012: 617–618). The species name was emended to what would have been the more correct *dombeyi* by some authors, but Hanley’s original spelling has to be maintained (ICZN Code Art. 32.5). NHMUK 1966550, four syntypes (one specimen was figured by G. B. Sowerby II, 1867: pl. 30, fig. 169).

eburnea, *Tellina – Hanley, 1844d: 61; 1846a: 241–242, 331, pl. 58, fig. 91. Tumbes, Peru; 5 fms. [9 m], soft sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Eurytellina*) *eburnea* Hanley, 1844 (Coan & Valentich-Scott, 2012: 635–636). Type material not found in NHMUK or Leeds Museum in 2012.

elongata, *Tellina* – Hanley, 1844f: 144; 1846a: 302, 332, pl. 62, fig. 199. [Golfo de] “Chiquiqui” [Chiriqui], West Colombia [Panama]; 3 fms. [5.5 m], sand; H. Cuming. *Non Tellinites elongatus* Schlothem, 1820 (under the ICZN Code Art. 11.5, *Tellinites* is equivalent to *Tellina*). Synonym of *Macoma* (*Psammacoma*) *elytrum* Keen, 1958 (Coan & Valentich-Scott,

2012: 605–606). NHMUK 1874.12.11.354, lectotype (selected by Myers, et al., 1983a: 64, figs. 2–3) (51.0 mm x 27.2 mm); NHMUK 198331, 198332, two paralectotypes (Myers, et al., 1983a: fig. 6). Myers, et al. (1983b: 88) stated that: “*Tellina elongata* Hanley, 1844 is a primary homonym of *T. elongata* Dillwyn, 1823, and therefore must be permanently rejected (ICZN Article 59A)” [referring to the pre-1985 Code; comparable wording is in ICZN Articles 23.9.5 and 57.2 of the 2000 Code]. However, Keen (1958) explicitly did not propose a replacement name but rather a new species in light of such homonymy (Coan & Petit, 2006: 114–115).

fabricii, *Tellina* – Hanley, 1846a: 318, 331, pl. 59, fig. 112. *Nom. nov. pro Tellina fragilis* (Fabricius, 1780: 413 – originally as *Venus*), *non T. fragilis* Linnaeus, 1758. Northern Seas. Synonym of the Arctic and boreal *Macoma balthica* (Linnaeus, 1758) (Coan et al., 2000: 417). Since this was a replacement name, the type material would be the specimen(s) that Fabricius had.

felix, *Tellina – Hanley, 1844d: 71; 1846a: 281, 330, pl. 57 (as “58” on p. 281), fig. 52. Panama; 6–10 fms. [11–18 m], sandy mud; H. Cuming. *Tellina* (*Moerella*) *felix* Hanley, 1844 (Coan & Valentich-Scott, 2012: 648–650). Type material not found in NHMUK or Leeds Museum in 2012.

fimbriata, *Tellina – Hanley, 1844f: 149; 1846a: 262, pl. 60, fig. 132. Loc. unknown; Cuming coll. *Arcopagia fimbriata* (Hanley, 1844) from Réunion and Mauritius (Drivas & Jay, 1988: 144, pl. 57, fig. 6); however, Huber (pers. comm., 2 Sept. 2012) concluded that this was referable to *Serratina*. NHMUK 20120181, two syntypes (smaller may be that figured by Hanley in fig. 132, 34.7 mm x 29.8 mm; larger syntype was figured by G. B. Sowerby II, 1866: 17, pl. 30, fig. 166, 40.3 mm x 32.8 mm).

formosa, *Tellina – Hanley, 1844f: 142; 1846a: 305, 331, pl. 58, fig. 83. Daleguete, Zebu [Philippine Islands]; H. Cuming. *Jactellina formosa* (Hanley, 1844) (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 20120182, figured holotype (13.3 mm x 10.3 mm).

frigida, *Tellina* – Hanley, 1844f: 143–144; 1846a: 327, 331, pl. 59, fig. 119. Kamchatka [Russia]; Petit de la Saussaye & Hanley colls. Synonym of *Macoma calcarea* (Gmelin, 1791) (Coan et al., 2000: 405, 409). NHMUK 1907.10.28.37, lectotype (selected by Coan, 1971: 27, pl. 7, fig. 34); NHMUK 1907.10.28.38, paralectotype).

gelida, *Tellina – Hanley, 1846a: 226, unfigured; Belcher coll. No loc. given. Type material not found in NHMUK or Leeds Museum in 2012. Species not identifiable, and best treated as a *nomen dubium* (M. Huber, pers. comm., 2 Sept. 2012).

gouldii, *Tellina – Hanley, 1846a: 272, 330, pl. 56, fig. 26. West Indies; Guilding. The western Atlantic *Tellina* (*Arorylus*) *gouldii* Hanley, 1846 (Boss, 1966: 270–272, pl. 139, fig. 4, pl. 142, fig. 4). Type material not found in NHMUK or Leeds Museum in 2012.

grandis, *Tellina – Hanley, 1844f: 141–142; 1846a: 327, 333, pl. 65, fig. 247. Tumbes [Tumbes], Peru; H. Cuming. The tropical eastern Pacific *Psammotreta* (*Psammotreta*) *grandis* (Hanley, 1844) (Coan & Valentich-Scott, 2012: 613–614). NHMUK 20120183, three syntypes (1 paired valves, and two unmatched valves, one labeled “measured syntype,” 82.7 mm x 62.2 mm); Leeds Museum 1957.173.175, two syntypes (two unmatched valves, 74.3 mm x 52.7 mm; 70.4 mm x 52.9 mm).

gubernaculum, *Tellina – Hanley, 1844f: 142; 1846a: 325, 332, pl. 62, fig. 186. “Real Llejos, Central America; 7 fms. [13 m], sandy mud; H. Cuming”. These specimens actually came from India (Coan & Valentich-Scott, 2012: 614–615). It also occurs in Vietnam (Hylleberg & Kilburn, 2003: 199, as *Macoma*; 201, as *Psammotreta*). Referrable to *Psammacoma* (M. Huber, pers. comm., 2 Sept. 2012). Two lots were identified by S. Whybrow in 1976 as possible syntypes, although they do not match Hanley’s illustration: NHMUK 1976126, 2 possible syntypes; NHMUK 1976127, 1 possible syntype.

gouldingii, *Tellina – Hanley, 1844d: 60; 1846a: 230, 330, pl. 56, fig. 1. West Indies; Metcalfe & Walton colls. The western Atlantic *Tellina* (*Eurytellina*) *gouldingii* Hanley, 1844 (Boss, 1966: 293–295, pl. 149, fig. 2, pl. 151, figs. 1, 2). Type material not found in NHMUK or Leeds Museum in 2012.

hiberna, *Tellina – Hanley, 1844f: 148; 1846a: 282, 330, pl. 57, fig. 53. Panama & Guayaquil [Guayas, Ecuador]; 6–11 fms. [11–20 m]; sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Eurytellina*) *hiberna* Hanley, 1844 (Coan & Valentich-Scott, 2012: 635–636). NHMUK 1982296/2, syntype (figured by Salisbury, 1934: pl. 13, figs. 7–9, as the “holotype” but the original description makes clear that the species was based on more than one specimen, per ICZN Code

Article 74.5) (19.1 mm x 10.8 mm); NHMUK 1982296/1, 1982296/3–5, four syntypes.

hilaris, *Tellina – Hanley, 1844f: 140; 1846a: 281–282, 330, pl. 57, fig. 54. Loc. unknown (“I suspect it comes to us from the Philippines”); Cuming coll. NHMUK 1984048, three syntypes (figured syntype 15.7 mm x 9.3 mm).

imbellis, *Tellina – Hanley, 1844d: 143; 1846a: 276–277, pl. 60, fig. 155. Loc. unknown; Cuming coll. *Tellinota imbellis* (Hanley, 1844) from Australia (M. Huber, pers. comm., 20 Dec. 2011); figured as *Tellina imbellis* Hanley, 1844 by Lamprell & Whitehead (1992: pl. 46, fig. 332). Type material not found in NHMUK or Leeds Museum in 2012.

incarnata, *Tellina* – Hanley, 1844d: 68; 1846a: 263, 330, pl. 56, fig. 15. *Non Tellina incarnata* Linnaeus, 1758. Renamed as *T. carnicolor* Hanley, 1846a (see above). San Nicolas, Zebu [Philippine Islands]; low water, sandy mud; H. Cuming. NHMUK 1874.12.11.338, figured syntype (Higo et al., 2001: 170, fig. B938); Leeds Museum 1957.173.1864, two possible syntypes.

inaequalis, *Tellina* – Hanley, 1844d: 71; 1846a: 278–279, pl. 57, fig. 44; 1859c: 236. *Non Tellina inaequalis* J. De C. Sowerby, 1824. Ceylon [Sri Lanka]; Cuming coll. Synonym of the western Indo-Pacific *Quadrans gargadia* (Linnaeus, 1758) (Lyngé, 1909: 196; Dey, 2006: 40). Type material not found in NHMUK or Leeds Museum in 2012.

inornata, *Tellina – Hanley, 1844f: 144; 1846a: 315–316, 331, pl. 59, fig. 123. Concepción [Concepción], Chile; 6 fms. [11 m], soft mud; H. Cuming. The Chilean *Macoma* (*Psammacoma*) *inornata* (Hanley, 1844) (Ramorino, 1968: 220–223, pl. 3, fig. 5, pl. 10, figs. 1, 2). NHMUK 1874.12.11.358, two syntypes (two non-matching valves, one broken, other 27.1 mm x 20.2 mm).

insculpta, *Tellina – Hanley, 1844d: 70; 1846a: 289, 331, pl. 60, fig. 136. [Golfo de] Chiriqui, West Colombia [Panama]; 3 fms. [5.5 m], sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Phyllodella*) *insculpta* Hanley, 1844 (Coan & Valentich-Scott, 2012: 653–654). *Tellina insculpta* Hanley, 1844, is the type species of *Phyllodella* Hertlein & Strong, 1949, by monotypy. NHMUK 1966537, possible syntype (42.4 mm x 21.5 mm). Hanley’s description refers to “This unique and elegant shell,” suggesting that it was based on one specimen, but the published dimensions (2 inches x 1 inch, c. 50 mm x 25 mm), are slightly larger than the NHMUK specimen.

irus, *Tellina – Hanley, 1845a: 166; 1846a: 319, 331, pl. 60, fig. 145. Loc. unknown; Cuming & Walton colls. The western Pacific *Heteromacoma irus* (Hanley, 1845) (Matsukuma, 2000: 982–983; Wang, 2004b: 284, pl. 156, fig. N, as “1844”). *Tellina irus* Hanley, 1845, is the type species of *Heteromacoma* Habe, 1952, by original designation. NHMUK 1966483/1, syntype (figured by Salisbury, 1934: 85, pl. 12, figs. 7, 8, as the “holotype” but the original description makes clear that there were two or more syntypes, from two collections) (26.9 mm x 21.1 mm); Higo et al., 2001: 171, fig. B984); NHMUK 1966483/2, syntype (34.4 mm x 27.5 mm). Salisbury (1934: 85) gave the type locality as “Guinea,” in error.

jubar, Tellina – Hanley, 1844d: 60; 1846a: 229, 332, pl. 63, fig. 214. Loc. unknown; Cuming & Sowerby colls. Synonym of the Indo-Pacific *Tellinella virgata* (Linnaeus, 1758) (Prashad, 1932a: 178–180). NHMUK 20120213, two syntypes (68.0 mm x 46.2 mm; 66.9 mm x 42.7 mm) (labeled as coming from “Montebello Ids. W. Australia” and “Swan River”). Hanley’s original description stated: “Two specimens only of this rare Tellen are as yet known.” MCZ 228033 (2 valves, 53.0 mm x 37.0 mm) was catalogued as “cotypes” from the Philippine Islands (Cuming coll.), but are probably only specimens later identified by Hanley (“idiotypes”).

juvenilis, *Tellina – Hanley, 1844f: 140–141; 1846a: 288, 330, pl. 57, fig. 63. Philippine Islands; H. Cuming. NHMUK 1986049, syntype (figured by Salisbury, 1934: 88, pl. 12, fig. 1, as “holotype,” but this was not a valid lectotype selection under either ICZN Code Art. 74.5 or 74.6) (15.1 mm x 11.7 mm).

laceridens, *Tellina – Hanley, 1844d: 61–62; 1846a: 243–244, 332, pl. 61, figs. 168, 176, 333, pl. 66, fig. 258. Tumbes, Peru; 3 fms. [5.5 m], soft sandy mud; H. Cuming. The tropical eastern Pacific *Tellina (Eurytellina) laceridens* Hanley, 1844 (Coan & Valentich-Scott, 2012: 637–638). NHMUK 20120230, two syntypes. NHMUK 1874.12.11.254 was labeled as a probable syntype, but is from the Lombe Taylor collection, and may instead represent the specimen later figured by G. B. Sowerby II (M. Huber, pers. comm. 2 Sept. 2012).

lilium, *Tellina – Hanley, 1844f: 147; 1846a: 303, 331, pl. 58, fig. 85. Burias, low water, sandy mud; Negros, 7 fms. [13 m], coral sand; [both Philippine Islands]; H. Cuming. *Semelangulus lillium* (Hanley, 1844) (Hylleberg & Kilburn, 2003: 201); a valid Indo-Pacific

Tellina, s.l. (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 20120185, syntype (20.0 mm x 12.5 mm).

listeri, Tellina – Hanley, 1844d: 69; 1846a: 278, 333, pl. 65, fig. 251. Senegal; Cuming & Hanley colls. Hanley (1844d: 69; 1846a: 278) also cited Lister (1687: fig. 235). *Non T. listeri* Röding, 1798. Renamed *T. senegambiensis* Salisbury, 1934 (p. 85), from west Africa (Nicklès, 1950: 224). NHMUK 20120186, two syntypes (65.2 mm x 50.2 mm; 72.0 mm x 57.2 mm); Leeds Museum, possible syntype 1957.173.1861 (60.8 mm x 50.1 mm).

lucerna, Tellina – Hanley, 1844f: 147; 1846a: 300–301, 331, pl. 58, fig. 98. Negros & Misamis; low water, sandy mud; & Panay, hard sand [all Philippine Islands]; H. Cuming. The western Pacific *Macoma lucerna* (Hanley, 1844) (Wang, 2004b: 283, pl. 155, fig. B). NHMUK 20120187, two syntypes (figured specimen 34.4 mm x 22.4 mm; 31.9 mm x 20.9 mm).

lucinoides, *Tellina – Hanley, 1846a: 251, 330, pl. 56, fig. 32. Chain Island, South Seas. Listed on on p. 251 as “Hanley, Zool. Proc. 1844”, but not in Hanley (1844–1845). A valid species of *Abranda* (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 20120172, two syntypes (figured syntype, 12.4 mm x 10.9 mm; smaller syntype partially broken).

lux, *Tellina – Hanley, 1844f: 140; 1846a: 288–289, 331, pl. 57, fig. 71. Philippine Islands; H. Cuming. *Tellina (Angulus) lux* Hanley, 1844 (Lyngé, 1909: 201). A valid species of *Nitidotellina* (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 1907.10.28.39-40, two syntypes (figured syntype 18.7 mm x 11.3 mm; other syntype 11.5 mm x 7.7 mm) (Oliver, 1992: pl. 35, fig. 8).

lyra, *Tellina – Hanley, 1844d: 68–69; 1846a: 271–272, 332, pl. 62, fig. 187. Tumbes [Tumbes], Peru; H. Cuming. The tropical eastern Pacific *Tellina (Lyratellina) lyra* Hanley, 1844 (Coan & Valentich-Scott, 2012: 653–654), type species of *Lyratellina* Olsson, 1961, by original designation. NHMUK 20120188, two syntypes (two left valves, figured syntype 43.4 mm x 30.0 mm; other syntype 56.6 mm x 39.1 mm).

mars, *Tellina – Hanley, 1846a: 273, 332, pl. 62, fig. 180. Guinea; Cuming coll. The west African *Tellina (Peronaea) mars* Hanley, 1846 (Nicklès, 1950: 224–225). NHMUK 20120189, holotype (51.7 mm x 25.6 mm) (Salisbury, 1934: pl. 9, fig. 3). Since Hanley stated it to be “the only specimen I have ever seen,” this specimen is the holotype.

- ****micans*, *Tellina*** – Hanley, 1844d: 72; 1846a: 309, 331, pl. 59, fig. 106. Catbalonga, Samar & Bias, Negros [all Philippine Islands]; H. Cuming. The Indo-Pacific *Pulvinus micans* (Hanley, 1844) (Lyngø, 1909: 204–205; Scarlato, 1965: 92, pl. 12, fig. 7; Hylleberg & Kilburn, 2003: 201; Wang, 2004b: 284, pl. 155, fig. C). *Tellina micans* Hanley, 1844, is the type species of *Pulvinus* Scarlato, 1965, by original designation. NHMUK 1976132/1, figured syntype (2 valves, 1 broken prior to 1984); NHMUK 1976133/1–3, three syntypes.
- ****miles*, *Tellina*** – Hanley, 1844f: 146–147; 1846a: 309, 332, pl. 62, fig. 188. Loc. unknown; Metcalfe coll. Type material not found in NHMUK or Leeds Museum in 2012.
- ****nobilis*, *Tellina*** – Hanley, 1845a: 165; 1846a: 300, 331, pl. 60, fig. 143. Orion, Bataan, Luzon [Philippine Islands]; low water, fine black sand; H. Cuming. *Macoma nobilis* (Hanley, 1845) from China and the Philippine Islands (Wang, 2004b: 283, pl. 155, fig. E, as “1844”). NHMUK 20120190/1, lectotype (selected by Salisbury, 1934: 81, pl. 9, fig. 1, as “holotype”) (36.1 mm x 22.8 mm); NHMUK 20120191/2, paralectotype (35.7 mm x 22.1 mm).
- ****nux*, *Tellina*** – Hanley, 1844d: 62–63; 1846a: 251–252, 330, pl. 56, fig. 33. St. Nicolas, Zebu [Philippine Islands]; 4 fms.; sandy mud; H. Cuming. *Pinguitellina nux* (Hanley, 1844) from the Philippine Islands (M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.
- ****owenii*, *Tellina*** – Hanley, 1845a: 164; 1846a: 235, 331, pl. 60, fig. 133. Africa; Zoological Society of London & British Museum colls. The west African *Tellina* (*Serratina*) *owenii* Hanley, 1845; figured by Nicklès (1950: 221–222, fig. 428), as *Quadrans chetelati* Fischer-Piette & Nicklès, 1946, a synonym, as he later recognized (Nicklès, 1955: 213). NHMUK 1951.5.21.1–3, four syntypes (three paired valves and one loose valve; figured syntype 35.6 mm x 20.5 mm).
- ****perplexa*, *Tellina*** – Hanley, 1844f: 149; 1846a: 269, 331, pl. 60, fig. 139. Manila Bay [Philippine Islands]; 6 fms. [11 m], sandy mud; H. Cuming. The western Pacific *Serratina perplexa* Hanley, 1844 (Higo et al., 2001: 170, fig. B941; Poppe & Langleit, 2011: pl. 1160, fig. 7, as *Tellina*; M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1996477, two possible syntypes (39.3 mm x 29.0 mm; 34.4 mm x 26.8 mm) (Higo et al., 2001: 170, fig. B941); Leeds Museum 1957.173.1862, one possible syntype (31.3 mm x 21.2 mm).
- ****pharaonis*, *Tellina*** – Hanley, 1844f: 148; 1846a: 235, 332, pl. 63, fig. 215. Red Sea; Metcalfe coll. Type species (subsequent designation Salisbury, 1934) of *Pharaonella* Lamy, 1918. A valid Red Sea species (M. Huber, pers. comm., 20 Dec. 2011), as recognized by Afshar (1969: 37, pl. 10, figs. 1–4), and not a synonym of *Tellina* (*Pharaonella*) *perna* Spengler, 1798, as suggested by Oliver (1992: 153). Type material not found in NHMUK or Leeds Museum in 2012.
- ****philippinarum*, *Tellina*** – Hanley, 1844d: 69; 1844g: pl. 14, fig. 18; 1846a: 279, 330, pl. 57, figs. 55, 56; 1846c: 9 (pl. expl.); 1856a: 347. San Nicolas, Zebu, & Jimmamailan, Negros [Philippine Islands]; H. Cuming. The western Pacific *Moerella philippinarum* Hanley, 1844 (Hylleberg & Kilburn, 2003: 200; Wang, 2004b: 285, pl. 156, fig. E); *Tellina*, s.l. (M. Huber, pers. comm. 2 Sept. 2012). NHMUK 1976129, two syntypes (specimen in fig. 56 is 26.4 mm x 19.8 mm; other syntype 25.6 mm x 19.1 mm; specimen in fig. 55 cannot be located) (Higo et al., 2001: 171, fig. B975, figured syntype, 1976129/1).
- ****pinguis*, *Tellina*** – Hanley, 1844d: 63; 1846a: 252, 330, pl. 56, fig. 34. St. Nicolas, Zebu [Philippine Islands]; H. Cuming. The Indo-Pacific *Pinguitellina pinguis* Hanley, 1844 (Lyngø, 1909: 191–192; Oliver, 1992: 151–152, pl. 30, fig. 3a, b; Hylleberg & Kilburn, 2003: 200; Wang, 2004b: 287, pl. 157, fig. D; M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1874.12.11.340, possible syntype (figured by G. B. Sowerby II, 1867: fig. 172; Higo et al., 2001: 170, fig. B959).
- ****plebeia*, *Tellina*** – Hanley, 1844f: 147; 1846a: 299, 331, pl. 59, fig. 129, 332, pl. 60, fig. 151. “Real Llejos, Central America” [Corinto, Nicaragua]; 7 fms. [13 m], sandy mud; H. Cuming”. The specimen actually proved to be from West Africa; indeed, Hanley (1846a: 299), added “Senegal” as a locality. A synonym of *Tellina cumana* O. G. Costa, 1829 (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 1966536, two syntypes (50.9 mm x 35.5 mm, possibly that figured in fig. 151; 41.8 mm x 28.2 mm, fig. 129); Leeds Museum 1957.173.24643, possible syntype (37.1 mm x 24.9 mm).
- ****plectrum*, *Tellina*** – Hanley, 1846a: 265–266, 332, pl. 61, fig. 177. Loc. not stated; Gray coll. Listed on p. 265 as “Hanley, Zool. Proc. 1844”, but not included in that paper (Hanley, 1844–1845). Status not yet resolved. NHMUK 20120191, holotype (51.4 mm x 40.2 mm, ex

Gray collection). Hanley's original description stated that: "A single valve in the collection of J. E. Gray, Esq. is all I have ever seen of this distinctly characterized species."

princeps, *Tellina – Hanley, 1844d: 62; 1846a: 238–239, 332, pl. 63, fig. 206. Tumbes [Tumbes], Piura, Peru; 5 fms. [9 m], soft sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Tellinidella*) *princeps* Hanley, 1844 (Coan & Valentich-Scott, 2012: 657–658). NHMUK 20120191, lectotype (selected by Salisbury, 1934: pl. 9, fig. 2, as "holotype" per ICZN Code Article 74.6) (74.8 mm x 41.8 mm) (additional syntypes not located in 2012).

prora, *Tellina – Hanley, 1844d: 61; 1846a: 243, 332, pl. 60, fig. 152. Santa Elena, Ecuador; 6 fms. [11 m]; sandy mud, & Salango, Ecuador; 9 fms. [16 m], sandy mud; both H. Cuming. The tropical eastern Pacific *Tellina* (*Eurytellina*) *prora* Hanley, 1844 (Coan & Valentich-Scott, 2012: 637–638). NHMUK 1852.5.26.59, syntype (41.2 mm x 25.5 mm).

pudica, *Tellina – Hanley, 1844d: 62; 1846a: 246–247, 330, pl. 56, fig. 7. Catbalonga, Samar [Philippines]; 10 fms. [18 m], soft mud; H. Cuming. The western Pacific *Tellina* (*Arcopagia*) *pudica* Hanley, 1844 (Lynge, 1909: 194, pl. 3, figs. 35–37). Type material not found in NHMUK or Leeds Museum in 2012.

puella, Tellina – Hanley, 1845a: 165. Senegal; Cuming & Metcalfe colls. Later, Hanley (1846a: 255), correctly synonymized this species with *Tellina ampullacea* Philippi, 1844, from Senegal. Type material not found in NHMUK or Leeds Museum in 2012.

pumila, Tellina – Hanley, 1844d: 69; 1846a: 279, 330, pl. 57, fig. 41. Valparaíso [Chile]; 7–30 fms., sandy mud; H. Cuming. A mislocalized Chinese *Tellina*, s.l. (M. Huber, pers. comm., 2 Sept. 2012). NHMUK 20120193/1, lectotype (selected by Salisbury, 1934: pl. 13, fig. 3, as "holotype") (22.6 mm x 16.6 mm); NHMUK 20120193/2, paralectotype (23.3 mm x 17.3 mm; is the specimen figured by Hanley on fig. 41).

rastellum, *Tellina – Hanley, 1844d: 59 – Sept.; 1844g: pl. 14, fig. 14; 1846a: 225, pl. 64, fig. 231, pl. 65, fig. 242; 1846c: 9 (pl. expl.); 1856a: 347. Zanzibar; Cuming & Stainforth colls. The Indo-Pacific *Tellina* (*Tellinella*) *rastellum* Hanley, 1844 (Oliver, 1992: 148, pl. 33, fig. 5a, b). However, this is a junior synonym of *Tellinella philippii* (Philippi, 1844, ex Anton ms – June), described earlier in the same year (Kilburn, 1974: 347). NHMUK 1976122, two syntypes (Cuming coll.) (77.3

mm x 36.1 mm; 82.2 mm x 37.4 mm) (both syntypes are smaller than the measurements given by Hanley (3.6 inches by 1.6 inches, c. 90 mm x 40 mm), which may correspond to the specimen from the Stainforth collection, not located).

regia, *Tellina – Hanley, 1844d: 61; 1846a: 240–241, 331, pl. 60, fig. 140. "Real Llejos, Central America" [Corinto, Nicaragua]; 7 fms. [13 m], coarse sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Eurytellina*) *regia* Hanley, 1844 (Coan & Valentich-Scott, 2012: 637–639). NHMUK 1966496, two syntypes (41.9 mm x 25.7 mm; 37.6 mm x 21.1 mm).

rhodon, *Tellina – Hanley, 1844f: 140 (as "*rodon*"); 1846a: 297, 331, pl. 58, fig. 93. Loc. unknown; Cuming coll. Hanley's 1844 description of "*rodon*" noted its rose coloration, and in 1846 he silently corrected the spelling to "*rhodon*," Greek for rose, but did not explain that he was making this correction. Under the ICZN Code, this is an unjustified emendation that has gained acceptance under ICZN Article 33.3.1 ("when an incorrect subsequent spelling is in prevailing usage and is attributed to the publication of the original spelling, the subsequent spelling and attribution are to be preserved and the spelling is deemed to be a correct original spelling."). Here, *Tellina rhodon* has been frequently cited in the literature, thereby satisfying Article 33.3.1 – it was reported from Java by Prashad (1932a: 194, pl. 5, figs. 37–38), who listed a number of earlier citations) and from the Philippine Islands by Faustino (1928: 89). NHMUK 20120194, figured syntype (20.6 mm x 11.1 mm).

robusta, *Tellina – Hanley, 1844d: 63; 1846a: 252–253, 330, pl. 56, figs. 2, 3. Isle of Annaa, "South Seas" [Anaa Island, Tuamotus] & Burias [Philippine Islands]; low water, sandy mud; H. Cuming. Type species by original designation of *Pinguitellina* Iredale, 1927. NHMUK 1996482, possible syntypes (one intact specimen and nine loose valves; label gives locality as "Tahiti") (Higo et al., 2001: 170, fig. 958). As E. A. Smith (1885: 271) noted, Cuming's collection included many specimens from "Annaa Island," which is east of Tahiti, and now known as Anaa Island (Tuamotus).

rodon, Tellina; see above: *rhodon, Tellina*

rubescens, *Tellina – Hanley, 1844d: 60; 1846a: 242–243, 332, pl. 60, fig. 153. Panama and Tumbes [Tumbes], Peru; sandy mud; H. Cuming. The tropical eastern Pacific *Tellina* (*Eurytellina*) *rubescens* Hanley, 1844 (Coan

- & Valentich-Scott, 2012: 639–640). NHMUK 20120195, two syntypes (figured syntype 32.0 mm x 19.8 mm; other syntype 43.5 mm x 27.3 mm).
- ***scalpellum, *Tellina*** – Hanley, 1844f: 147; 1846a: 310, 331, pl. 59, fig. 116. Zebu [Philippine Islands]; low water, sandy mud; H. Cuming. Valid species of *Tellina*, s.l. (M. Huber, 20 Dec. 2011). NHMUK 1976124, three syntypes.
- ***semen, *Tellina*** – Hanley, 1845a: 164; 1846a: 249–250, 330, pl. 56, fig. 8. Corregidor [Philippine Islands]; 12 fms. [22 m], sandy mud; H. Cuming. The western Pacific *Cadella semen* (Hanley, 1845) (Lynge, 1909: 198–199; Wang, 2004b: 287, pl. 157, fig. C, as “1844”). NHMUK 20060797, two possible syntypes (four valves), but from Torres Strait (Australia); largest figured by Simone & Wilkinson (2008: 152, figs. 39–34).
- senegalensis, *Tellina*** – Hanley, 1844d: 68; 1846a: 259–260, pl. 56, fig. 17. Senegal. *Non Tellina senegalensis* Gmelin, 1791. Synonym of the west African *Strigilla* (*Aeretica*) *splendida* (Anton, 1838) (E. A. Smith, 1915; Salisbury, 1934: 89). E. A. Smith (1915) proposed a “nom. nov.”, *Strigilla tomlini*, for the *S. splendida* (Anton) figured by Hanley (1846: 259, pl. 56, fig. 39) from the Philippine Islands, but this has to be interpreted as a new species, not a new name. Thus, the “lectotype” of Hanley’s species (NHMUK 1996480) later figured by Salisbury (1934: pl. 11, fig. 1), is, in fact, the holotype of *S. tomlini* E. A. Smith, 1915. *Tellina senegalensis* Hanley, 1844, is the type species of *Aeretica* Dall, 1900, by original designation.
- ***sincera, *Tellina*** {XE “**sincera, *Tellina***”} – Hanley, 1844d: 68; 1846a: 261, 331, pl. 60 [“59” in error on p. 261], fig. 144. Loc. unknown; Cuming & Metcalfe colls. Australian authors have treated this as a valid Australian species, *Strigilla* (*Strigilla*) *sincera* (Hanley, 1844) (Hedley, 1913: 272–273; Lamprell & Whitehead, 1992: pl. 48, fig. 356). Hedley (1913: 273) stated that he “found two unnamed *Strigilla* labeled ‘Moreton Bay, Mr. Strange,’” which E. A. Smith and he “agreed to identify [as] the type of Hanley’s *Strigilla sincera*.” Hedley (1913: 273) concluded that records from Panama (eastern Pacific) of this species were misidentified specimens of *Strigilla disjuncta* Carpenter, 1856. However, M. Huber (pers. comm. 2 Sept. 2012) determined that the type material did, in fact, correspond to the eastern Pacific species of *Strigilla*, and the Australian species is instead *Strigilla* (*Strigilla*) *grossiana* Hedley, 1908, which is distinct from Hanley’s type material identified by Hedley. Hence, Hanley’s species would be a senior synonym of *Strigilla disjuncta* Carpenter, 1856 (for the latter, see Coan & Valentich-Scott, 2012: 621–622). NHMUK 20120171, two syntypes (30.6 mm x 27.6 mm; 29.8 mm x 26.3 mm).
- sol, *Tellina*** – Hanley, 1844f: 142–143; 1846a: 275, 333, pl. 65, fig. 240. Loc. unknown [“restricted” to St. Croix, Virgin Islands (Boss, 1966)]; Cuming & Metcalfe colls. Synonym of the western Atlantic *Laciolina magna* (Spengler, 1798) (Boss, 1966: 249–251, pl. 133, figs. 4, 5; pl. 134, fig. 4, as *Tellina*). NHMUK 1987059, two syntypes (104.7 mm x 60.0 mm; 95.2 mm x 55.9 mm). Boss (1966: 249–250) stated that the smaller specimen was the “holotype,” but this was not a valid lectotype selection under ICZN Code Article 74.5 as Hanley referred to specimens from the Cuming and the Metcalfe collections.
- ***souleyeti, *Tellina*** – Hanley, 1844d: 71–72; 1846a: 308–309, 331, pl. 59, fig. 111. San Nicolas, Zebu [Philippine Islands]; low water, sandy mud; H. Cuming. Type material not found in NHMUK or Leeds Museum in 2012.
- ***sowerbii, *Tellina*** – Hanley, 1844d: 62; 1846a: 247, 332, pl. 63, fig. 205. Loc. unknown; Sowerby & Hanley colls. The Australian *Laciolina sowerbii* (Hanley, 1844) (Lamprell & Whitehead, 1992: pl. 43, fig. 301, as *Tellina*). NHMUK 1976131/1, figured syntype (68.5 mm x 39.0 mm); NHMUK 1976131/2, syntype (one valve, 68.0 mm x 39.1 mm); Leeds Museum 1957.173.1860, syntype (59.2 mm x 33.3 mm).
- ***spectabilis, *Tellina*** – Hanley, 1844f: 141; 1846a: 323, 333, pl. 65, fig. 254. Manila Bay & Siquijor [Philippine Islands], low water, coral sand; H. Cuming. The southeast Asian and Philippine Islands *Leporimetis spectabilis* (Hanley, 1844) (Scarlato, 1965: 75, pl. 7, fig. 4; Hylleberg & Kilburn, 2003: 197; Wang, 2004b: 282, pl. 155, fig. J). The material reported as this species from Australia (Lamprell & Whitehead, 1992: pl. 50, fig. 37) is instead a distinct species (M. Huber, pers. comm., 2 Sept. 2012). *Tellina spectabilis* Hanley, 1844, is the type species of *Leporimetis* Iredale, 1930, by original designation. NHMUK 199484, two possible syntypes (63.0 mm x 55.4 mm; 63.7 mm x 59.5 mm) (Higo et al., 2001: 171, fig. B1006).

- ***spinosa, *Tellina*** – Hanley, 1844f: 148–149; 1846a: 264–265, pl. 57 (as “58” on p. 264), fig. 40. Ticao [Philippine Islands]; H. Cuming. The Philippine Islands *Quadrans spinosus* (Hanley, 1844) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1986093, holotype (19.0 mm x 14.1 mm) (Hanley referred to “Mr. Cuming’s unique specimen,” so this is a holotype) (Higo et al., 2001: 170, fig. B957).
- ***subrosea, *Tellina*** – Hanley, 1846a: 298, 330, pl. 57, fig. 64. Catbalonga, Samar [Philippine Islands]; soft mud; H. Cuming. Possibly referable to *Nitidotellina*, but lacking type material and not definitively identifiable, so better treated as a *nomen dubium* (M. Huber, pers. comm., 2 Sept. 2012). Type material not found in NHMUK or Leeds Museum in 2012.
- ***subtruncata, *Tellina*** – Hanley, 1844f: 149; 1846a: 367, pl. 57, fig. 48. Bohol [Philippine Islands]; low water, on reefs; H. Cuming. *Pristipagia subtruncata* (Hanley, 1844), from the Philippine Islands (Salisbury, 1934: 85, pl. 11, fig. 2, as *Arcopagia*; M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1976121, two syntype valves (17.3 mm x 13.8 mm) (Higo et al., 2001: 170, fig. B944). Salisbury (1934: 85) referred to these valves as the “holotype,” but Hanley referred to more than one specimen (Cuming and Belcher collections, the latter not located in 2012), so this was not a valid lectotype selection (ICZN Code Article 74.5).
- ***tulipa, *Tellina*** – Hanley, 1844f: 148; 1846a: 232–233, 330, pl. 56, fig. 25. Loc. unknown; Cuming & Walton colls. NHMUK 20120196, figured syntype (21.1 mm x 12.1 mm). Salisbury (1934: pl. 9, fig. 2) stated that this specimen was the “holotype,” but Hanley referred to more than one specimen (Cuming collection and Walton collection, the latter not located in 2012), so this was not a valid lectotype selection (ICZN Code Article 74.5).
- ***undulata, *Tellina*** – Hanley, 1844d: 72; 1846a: 310, 331, pl. 59, fig. 107. Santa Elena, West Colombia [Guayas, Ecuador]; 6 fms. [11 m], sandy mud; H. Cuming. The tropical eastern Pacific *Cymatoica undulata* (Hanley, 1844) (Coan & Valentich-Scott, 2012: 601–602). *Tellina undulata* Hanley, 1844, is the type species of *Cymatoica* Dall, 1900, by original designation. NHMUK 1874.12.11.329, syntype (16.7 mm x 9.3 mm).
- ***valtonis, *Tellina*** – Hanley, 1844f: 143; 1846a: 283–284, 330, pl. 57, fig. 68. Loc. unknown; Metcalfe coll. The Japanese *Nitidotellina valtonis* (Hanley, 1844). The figures in Oliver (1992), Lamprell & Whitehead (1992: pl. 44, fig. 308, as *Tellina*) and Poppe & Langleit (2011) are misidentified specimens of other species (M. Huber, pers. comm., 2 Sept. 2012).
- ***vernalis, *Tellina*** – Hanley, 1844f: 141; 1846a: 289, 331, pl. 58, fig. 84. Singapore, 7 fms. [13 m], sandy mud; H. Cuming. Probably referable to *Nitidotellina* (M. Huber, pers. comm. 2 Sept. 2012). The illustrations in Lamprell & Whitehead (1992: pl. 44, fig. 310) and Oliver (1992: pl. 35, fig. 8) refer to other species (M. Huber, pers. comm., 2 Sept. 2012). Type material not found in NHMUK or Leeds Museum in 2012.
- ***verrucosa, *Tellina*** – Hanley, 1844d: 60; 1846a: 225, pl. 68, fig. 77. Corregidor, Manila [Philippine Islands]; H. Cuming. *Scutarcopagia verrucosa* (Hanley, 1844) from the Philippine Islands (Higo et al., 2001: 169, fig. B917, syntype; Poppe & Langleit, 2011: pl. 1154, figs. 2, 3, as *Tellina*; M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1976125, syntypes (figured syntype 35.4 mm x 17.4 mm) (Higo et al., 2001: 169, fig. B917). Hanley specified that: “Two specimens ... only are as yet known,” but NHMUK 1976125 contains three specimens, so one must have been added at a later date.
- ***vestalis, *Tellina*** – Hanley, 1844f: 141; 1846a: 291, 330, pl. 57, fig. 67 (as “[fig.] 97” on p. 330). Negros, 7 fms. [13 m], coral sand, & Luzon, 6 fms. [11 m], mud [Philippine Islands]; H. Cuming. The southeast Asian *Tellina vestalis* Hanley, 1844 (Lynge, 1909: 198; Hylleberg & Kilburn, 2003: 196; Wang, 2004b: 279, pl. 154, fig. F; Poppe & Langleit, 2011: pl. 1156, fig. 3 only, not fig. 4). NHMUK 1993044, three syntypes (figured syntype 28.8 mm x 15.3 mm; other two syntypes are smaller).
- ***virgo, *Tellina*** – Hanley, 1844f: 143; 1846a: 284–285, 330, pl. 57, fig. 42. Loc. unknown; H. Cuming. The tropical eastern Pacific *Tellina* (*Scissula*) *virgo* Hanley, 1844 (Coan & Valentich-Scott, 2012: 656, 658). NHMUK 20120197/1, lectotype (23.1 mm x 13.8 mm) (selected by Salisbury, 1934: pl. 13, fig. 5, as “holotype” pursuant to ICZN Code Article 74.6); NHMUK 20120197/2, paralectotype (19.4 mm x 11.1 mm) (Salisbury, 1934: pl. 13, fig. 6).
- ***virgulata, *Tellina*** – Hanley, 1845a: 164; 1846a: 231, 330, pl. 56, fig. 5. Loc. unknown; Cuming coll. NHMUK 20120198, possible syntype (15.0 mm x 7.8 mm) (same size as fig. 5, and slightly shorter than measurements given by Hanley, 0.3 inches by 0.7 inches).

vulsella, Tellina – Hanley, 1846a: 235–236, 332, pl. 61, figs. 162, 163, ex Chemnitz ms. Zebu [Cebu], Philippine Islands. Synonym of the western Pacific *Pharaonella aurea* (Perry, 1811) (Petit, 2003: 27; Poppe & Langleit, 2011: pl. 1155, fig. 2). Leeds Museum 1957.173.174, one specimen, with note in collection by S. Whybrow (Morris), “unlikely to be a type” (Sept. 1979) (64.0 mm x 25.4 mm).

Donacidae

Note: in his 1843 publications, Hanley treated the genus *Donax* as having feminine gender, with the species names ending in “a”, whereas in his 1845 and subsequent publications, he correctly treated this genus as having masculine gender, with the species names usually ending in “s”.

***asper, Donax** – Hanley, 1845d: 14–15. Tumbes [Tumbes], Peru; H. Cuming. The tropical eastern Pacific *Donax* (*Assimilidonax*) *asper* Hanley, 1845 (Coan & Valentich-Scott, 2012: 675–676). NHMUK 198212/1, lectotype (selected by Coan, 1983: 283, fig. 22); NHMUK 198212/2–3, two paralectotypes; NHMUK 198213, three probable paralectotypes.

***assimilis, Donax** – Hanley, 1845e: 17. Panama; Cuming & Hanley colls.; probably collected by H. Cuming. The tropical eastern Pacific *Donax* (*Assimilidonax*) *assimilis* Hanley, 1845 (Coan & Valentich-Scott, 2012: 675–676). *Donax assimilis* Hanley 1843, is the type species of *Assimilidonax* Huber, 2010, by original designation. NHMUK 198214/1, lectotype (selected by Coan, 1983: 282, fig. 17); NHMUK 198214/2–3, two paralectotypes.

***carinata, Donax** – Hanley, 1843b: 84; 1843c: 5–6; 1844g: pl. 14, fig. 28; 1846c: 9 (pl. expl.). Mus. Stainforth & Metcalfe collection (1843c). Loc. not stated. The tropical eastern Pacific *Donax* (*Carinadonax*) *carinatus* Hanley, 1843 (Coan & Valentich-Scott, 2012: 671–673). *Donax carinatus* Hanley, 1843, is the type species of *Carinadonax* Huber, 2010; by original designation. NHMUK 1900.2.8.4, syntype (figured by Coan, 1983: 285, fig. 24, as “presumably the holotype,” but the species was described from specimens in two collections).

***culter, Donax** – Hanley, 1845d: 14. Mazatlan & Acapulco, Mexico; Cuming coll. The tropical eastern Pacific *Donax* (*Chion*) *culter* Hanley, 1845 (Coan & Valentich-Scott, 2012: 667–668). NHMUK 1966547/1, lectotype (selected by Coan, 1983: 280, fig. 12); NHMUK 1966547/2–3, two paralectotypes.

***dentifera, Donax** – Hanley, 1843b: 84; 1843c: 6; 1844g: pl. 14, fig. 20; 1846c: 9 (pl. expl.). “S. America?” [tropical eastern Pacific]. The tropical eastern Pacific *Donax* (*Assimilidonax*) *dentifer* Hanley, 1843 (Coan & Valentich-Scott, 2012: 674–675). NHMUK 1912.6.18.28, lectotype (selected by Coan, 1983: 283, fig. 20); paralectotype(s) not located in NHMUK or Leeds Museum in 2012.

flavidus, Donax – Hanley, 1882a: 540–541, pl. 12, fig. 3. Borneo; ex Geale coll. Synonym of the southeast Asian *Donax* (*Dentilatona*) *incarnatus* Gmelin, 1791 (Huber, 2010: 319, 690). NHMUK 1900.3.9.24, holotype (9.6 mm x 11.4 mm). Hanley referred to “this very rare shell, of which I have never seen but one example,” so this is the holotype.

***gracilis, Donax** – Hanley, 1845d: 15. Golfo de Guayaquil & Bahía de Caráquez, Ecuador; & Chiriqui, Panama; H. Cuming. The tropical eastern Pacific *Donax* (*Paradonax*) *gracilis* Hanley, 1845 (Coan & Valentich-Scott, 2012: 673–674). NHMUK 1966551/1, lectotype (selected by Coan, 1983: 290, fig. 320); NHMUK 1966551/2–3, two paralectotypes. NHMUK 198221 has two specimens that correspond to “var. c” of this species.

***impar, Donax** – Hanley, 1882a: 541, pl. 12, fig. 4. Beloochistan [Balochistan, Pakistan]; Blanford. *Donax* (*Machaerodonax*) *impar* Hanley, 1882, from the Indian Ocean (Huber, 2010: 320). NHMUK 1904.10.28.138, holotype (one valve, 14.8 mm x 5.7 mm). Hanley stated: “I possess only a single valve”, so this is the holotype.

***listeri, Donax** – Hanley, 1882a: 540, pl. 12, fig. 2. Loc. unknown; ex Belcher coll. The Southeast Asian *Donax* (*Latona*) *listeri* Hanley, 1882 (Huber, 2010: 381). NHMUK 1900.3.9.25, holotype (32.9 mm x 26.9 mm). Hanley referred to “our unique specimen”, so this is the holotype.

***lubricus, Donax** – Hanley, 1845e: 17. Loc. unknown; Cuming coll. The South African *Donax* (*Dentilatona*) *lubricus* Hanley, 1845 (Huber, 2010: 319). NHMUK 1980099, syntype (figured by Reeve, 1854: pl. 7, fig. 46); NHMUK 1980100, syntype.

mesodesmoides, Donax – Hanley, 1882a: 539–540, pl. 12, fig. 1. Loc. unknown. Synonym of the South African *Donax* (*Donax*) *serra* Röding, 1798 (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1907.10.28.109, holotype (43.9 mm x 27.0 mm). Hanley referred to “This unique and aberrant species,” and the rest of the description implies that it was based on a single specimen.

navicula, *Donax* – Hanley, 1845d: 15. Golfo de Nicoya, Central America [Costa Rica]; H. Cuming. Synonym of the eastern Pacific *Donax* (*Paradonax*) *californicus* Conrad, 1837 (Coan & Valentich-Scott, 2012: 673–674). NHMUK 1967697/1, lectotype (selected by Coan, 1973: 134; figured in Coan, 1983: 289, fig. 31); NHMUK 1967697/2–3, two paralectotypes (in 1981, S. Morris found the missing left valve of the first paralectotype, and a third specimen, which she stated in a note in the collection was “presumed to be another syntype”).

****owenii, Donax*** – Hanley, 1843b: 81–82, ex Gray ms. Africa. The West African *Donax* (*Tentidonax*) *owenii* Hanley, 1843 (Nicklès, 1950: 213; Huber, 2010: 317). NHMUK 1981248, five syntypes.

****pulchella, Donax*** – Hanley, 1843b: 86; 1843c: 6; 1844g: pl. 14, fig. 19; 1846c: 9 (pl. expl.). “West Indies?” The West African *Donax* (*Donax*) *pulchellus* Hanley, 1843 (Nicklès, 1950: 213; Huber, 2010: 313). NHMUK 1900.2.8.44, figured syntype (single left valve); NHMUK 1900.2.8.21, one syntype; NHMUK 1900.2.8.22–25, four syntypes.

****punctatostriata, Donax*** – Hanley, 1843b: 84–85; 1843c: 5, both as “*punctato-striata*”; 1844g: pl. 14, fig. 24; 1846c: 9 (pl. expl.), as “*punctato-striatus*”. “China” [actually tropical eastern Pacific]. The tropical eastern Pacific *Donax* (*Chion*) *punctatostriatus* Hanley, 1843 (Coan & Valentich-Scott, 2012: 670–671). NHMUK 1912.6.18.27, lectotype (selected by Coan, 1983: 275, fig. 1); paralectotype(s) not located in NHMUK or Leeds Museum in 2012.

****semisulcata, Donax*** – Hanley, 1843b: 85; 1843c: 5; 1844g: pl. 14, fig. 25; 1846c: 9 (pl. expl.). Loc. not stated. The Southeast Asian *Donax* (*Deltachion*) *semisulcatus* Hanley, 1843 (Hylleberg & Kilburn, 2002: 67; Huber, 2010: 321). NHMUK 1907.10.28.143–144, two syntypes (“E. Africa”).

****sordidus, Donax*** – Hanley, 1845d: 15–16. Cape of Good Hope, South Africa; Cuming & British Museum colls. The South African *Donax* (*Assimilidonax*) *sordidus* Hanley, 1856 (Huber, 2010: 315). NHMUK 1840.10.23.165, one syntype; NHMUK 2012069, one syntype.

****ticaonicus, Donax*** – Hanley, 1845d: 14. Ticao [Philippine Islands]; H. Cuming. The Indo-Pacific *Donax* (*Latona*) *ticaonicus* Hanley, 1845 (Huber, 2010: 318). NHMUK 1996449, possible syntype (Higo et al., 2001: 174, fig. B1081).

Psammobiidae

costata, Psammobia – Hanley, 1843a: 122–123; 1843b: 59; 1843f: 5 (pl. expl.); 1843g: pl. 11, fig. 12. New Zealand (1843a); Australia (1843b). Hanley’s paper (1843a) was misattributed to Reeve by both Sherborn (1925: 1576) and Willan (1993: 49, 100), whereas Reeve merely conveyed the paper by Hanley to the Zoological Society, as he did for some others in 1842–1843, before Hanley was on hand to present his own work. Willan (1993: 49) concluded that Hanley’s species was based on mislocalized material of the North Atlantic *Gari virgata* (Lamarck, 1818). Type material not found in NHMUK or Leeds Museum in 2012.

Semelidae

****carnicolor, Amphidesma*** – Hanley, 1845b: 162; 1843f: 6 (pl. expl.); 1843g: pl. 12, fig. 28; 1856a: 342. Philippine Islands; Cuming & Hanley colls.; possibly collected by H. Cuming. The Indo-Pacific *Semele carnicolor* (Hanley, 1845) (Oliver, 1992: 167, pl. 30, fig. 5a, b; Hylleberg & Kilburn, 2003: 203; Huber, 2010: 338). NHMUK 1907.10.28.137, possible syntype (24.9 mm x 23.9 mm) (Higo et al., 2001: 172, fig. B1009); NHMUK 20110072, three syntypes (including specimen later figured by Reeve, 1853: pl. 1, fig. 6).

****gravida, Leptomya*** – Hanley, 1879: 580–581; 1882a: 541, pl. 12, fig. 5. Loc. unknown; Hanley coll. Possibly a distinct, poorly known species (Huber, 2010: 702). NHMUK 1907.10.28.99, holotype (one left valve, from “Aracan” [Burma]) (30.1 mm x 23.2 mm). Hanley stated “I have only seen a single valve (a left one)” of this species, so this specimen is the holotype.

multicostatum, Amphidesma – G. B. Sowerby I, 1841: 8, *nomen nudum*; Hanley, 1858f: *Amphidesma* pl. 1, fig. 11, ex G. B. Sowerby I ms. Status unresolved. Type material not found in NHMUK or Leeds Museum in 2012.

****psittacus, Leptomya*** – Hanley, 1882a: 541, pl. 12, fig. 6; 1882b: 576. Loc. unknown; Hanley coll. The Indian Ocean *Leptomya psittacus* Hanley, 1882 (Hylleberg & Kilburn, 2003: 203; Huber, 2010: 343). NHMUK 1907.10.28.100, syntype (30.8 mm x 22.2 mm). Although Hanley referred to “this very rare shell,” he did not state that it was the unique specimen, so the NHMUK specimen is not a holotype.

***scabrum**, *Amphidesma* – Hanley, 1843f: 6 (pl. expl.); 1843g: pl. 12, fig. 9; 1844c: 17; 1856a: 342 (pl. 13 mistakenly cited). Boljoon, Zebu. Attributed to W. Metcalfe in Sherborn (1930: 5765). The Southeast Asian *Semele scabra* (Hanley, 1843) (Wang, 2004b: 294, pl. 160, fig. H; Huber, 2010: 339; Poppe, 2011b: pl. 1177, figs. 9, 10). Hanley gave the measurements of this species as 0.2 inches by 2.5 inches, an obvious error. Type material not found in NHMUK or Leeds Museum in 2012. Solene Whybrow (later Morris) determined that Leeds Museum 1957.173.618, which is labeled as this species, was not the type specimen, according to her note in the collection (Sept. 1979).

spectabilis, *Leptomya* – Hanley, 1882a: 541, pl. 12, fig. 7; 1882b: 576–577. “Japan?” (1882b); Hanley coll. Synonym of *Leptomya rostrata* (H. Adams, 1868) from the Red Sea (Huber, 2010: 343, 701–702). NHMUK 1907.12.30.527, syntype (27.7 mm x 20.1 mm). The original description also refers to specimens in the Taylor collection and the British Museum collection, so this NHMUK lot is not a holotype.

***zebuense**, *Amphidesma* – Hanley, 1843f: 6 (pl. expl.); 1843g: pl. 12, fig. 7; 1844c: 17–18; 1856a: 342. Zebu, Philippine Islands. Attributed to W. Metcalfe in Sherborn (1932: 7038). This species dates from the appearance of the plate corresponding to the previously published plate explanation. *Semele zebuensis* (Hanley, 1843) from the Philippine Islands (Huber, 2010: 339). The figures in Poppe labeled as being this species (2011b: pl. 1177, figs. 5–8) are instead *Semele duplicata* (Reeve, 1853) and *Semele exarata* (A. Adams & Reeve, 1850) (M. Huber, pers. comm., 28 May 2012). NHMUK 1996452, three possible syntypes (Higo et al., 2001: 171, fig. B1007).

Solecurtidae

bidens, *Solen* – Hanley, 1842b: 16, pl. 2, fig. 24; 1843f: 2 (Syst. List; mistakenly referencing pl. 3, fig. 11), [2] (expl. to pl. 2); 1856a: 336, ex Chemnitz ms. Based in part on Chemnitz (1795: pl. 198, fig. 1939). “Nicobar Islands”. Synonym of the western Atlantic *Tagelus divisus* (Spengler, 1794) (Forbes & Hanley, 1848: 266; Dall, 1898: 62). Type material not found in NHMUK or Leeds Museum in 2012.

Mactridae

lisor, *Mactra* – “Hanley”, 1842b: 32, ex Adanson (1757); 1843b: pl. 3, fig. 57; 1843f: 4 (Syst. List), [3] (expl. to pl. 3), 6 (expl. to pl. 11); 1843g: pl. 11, figs. 54, 55; 1855: 56. Senegal. Although sometimes credited to Hanley, this pre-Linnaean Adanson name was made available still earlier by Anton, 1838. However, it is a synonym of the west African *Mactra* (*Mactra*) *glabrata* Linnaeus, 1767 (Hanley, 1855: 56; Nicklès, 1950: 208; Huber, 2010: 440, 755).

Mesodesmatidae

***planum**, *Mesodesma* – Hanley, 1843e: 102; 1843f: 6 (pl. expl.); 1843g: pl. 12, fig. 19; 1856a: 341. Loc. unknown. Attributed to Reeve in Sherborn (1929: 5018). Type species of *Davila* Gray, 1853 [type species by monotypy: *D. polita* Gray, 1853, = *Mesodesma planum*]. *Davila plana* (Hanley, 1843) occurs in the western Indo-Pacific (Beu, 1971: 125; Matsukuma, 2000: 968–969; Qi, 2004: 274, pl. 150, fig. I). Type material not found in NHMUK or Leeds Museum in 2012.

triquetrum, *Mesodesma* – Hanley, 1843e: 101–102; 1843f: 6 (pl. expl.); 1843g: pl. 12, fig. 20; 1856a: 341. Loc. unknown. Attributed to Reeve in Sherborn (1931: 6626). Synonym of the South Australian *Anapella cycladea* (Lamarck, 1818) (Lamprell & Whitehead, 1992: pl. 41, fig. 287). Hanley's species is the type, by original designation, of *Anapella* Dall, 1895. Type material not found in NHMUK or Leeds Museum in 2012.

Ungulinidae

***cumingii**, *Cyrenoidea* – Hanley, 1844g: pl. 15, fig. 5 (without caption); 1846c: 10 (pl. expl.); 1856a: 353. Philippine Islands. This and the next species date from when the explanation of the earlier plate is known to have appeared. Qi (2004: 257–258, pl. 142, fig. I) and Xu (2012: 71–72, fig. 40), both as “1844”, figured this as the western Pacific *Cycladicama cumingii* (Hanley, 1846). However, Huber (pers. comm., 20 Dec. 2011) considers these to have been based on misidentified specimens of *Joannisiella coreensis* (A. Adams & Reeve, 1850). The true *Cycladicama cumingii* (Hanley, 1846) occurs in Southeast Asia (Hylleberg & Kilburn, 2003: 174), and it

was included in a genetic analysis of the Heterodonta (Taylor et al., 2007: 591). NHMUK 1900.2.13.7, syntype (26.1 mm x 23.6 mm).

***oblonga, Cyrenoidea** – Hanley, 1844g: pl. 15, fig. 6 (without caption); 1846c: 10 (pl. expl.); 1856a: 353. Philippine Islands. The western Pacific *Cycladicama oblonga* (Hanley, 1846) (Hylleberg & Kilburn, 2003: 174, as “1856”; Qi, 2004: 258, pl. 142, fig. J; Xu, 2012: 69–71, fig. 39, the latter two as “1844”), or perhaps more appropriately *Joannisiella oblonga* (Hanley, 1846) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1900.2.13.8, syntype (33.4 mm x 27.3 mm).

Veneridae

***bruguieri, Venus** – Hanley, 1844g: pl. 15, fig. 59 (without caption); 1845f: 21; 1846c: 12 (pl. expl., as “brugieri”); 1856a: 362; 1859c: 237. Loc. unknown; Cuming & Hanley colls. The Indian *Venerupis (Ruditapes) bruguieri* (Hanley, 1845) (Huber, 2010: 428). Type material not found in NHMUK or Leeds Museum in 2012.

***chemnitzii, Venus** – Hanley, 1844e: 160–161; 1844g: pl. 16, fig. 20; 1846c: 13 (pl. expl.); 1856a: 360. San Nicholas, Philippine Islands; H. Cuming; Cuming & Hanley colls. The Indo-Pacific *Periglypta chemnitzii* (Hanley, 1844) (Qi, 2004: 308, pl. 167, fig. F) or *Antigona chemnitzii* (Hanley, 1844) (Pope, 2011a: pl. 1125, figs. 1–4, as “1845”). NHMUK 196244, three syntypes (smallest figured by Hanley and by Reeve, 1863: pl. 10, fig. 32a; another syntype figured by Reeve, 1863: pl. 10, fig. 32b) (Higo et al., 2001: 175, fig. B1129, as *Periglypta*). Leeds Museum 1957.173.15189, syntype (46.2 mm x 36.6 mm); Leeds Museum 1957.173.25818, possible syntype (58.3 mm x 45.3 mm).

***cor, Cytherea** – Hanley, 1844e: 110; 1844g: 10 (pl. expl.), pl. 15, fig. 7; 1856a: 354. Africa; Metcalfe coll. The west African *Costellipitar cor* (Hanley, 1844) (Huber, 2010: 397). NHMUK 1907.10.28.16, syntype (22.0 mm x 18.1 mm).

decipiens, Venus – Hanley, 1844g: pl. 16, fig. 22; 1845b: 162; 1846c: 13 (pl. expl.); 1856a: 360. “Australia?” (1845b); Cuming & Hanley colls. By 1856a (p. 360), Hanley said that he “had reason to believe” that this species may have been based on a young, mislocalized specimen of the eastern Atlantic *Clausinella fasciata* (da Costa, 1778), and that is indeed the case (Fischer-Piette &

Vukanovich, 1977: 110–113; Huber, 2010: 715). NHMUK 1907.10.28.102, syntype (16.6 mm x 14.1 mm).

deshayesii, Venus – Hanley, 1844g: pl. 16, fig. 35; 1846c: 13 (pl. expl.); 1856a: 363. Loc. not stated (1846c); “Philippines” (1856a). Hanley’s plate explanation in 1846 included a footnote that was disclaimed in 1856. This Indo-Pacific species was listed as *Tapes deshayesi* (G. B. Sowerby II, 1852), with *Venus deshayesii* “Hanley, 1856,” in synonymy by Oliver (1992: 189–190, pl. 43, fig. 3a, b). In fact, Hanley’s species dates from the publication of Hanley’s 1846 plate explanation, but is a junior synonym of *Tapes sulcarius* (Lamarck, 1818) (M. Huber, pers. comm., 20 Dec. 2011). Leeds Museum 1957.173.25821, two possible syntypes.

***diemenensis, Cytherea** – Hanley, 1844e: 110. Van Diemen’s Land [Tasmania, Australia]; Metcalfe coll. The southern Australian *Callista (Striacallista) diemensis* (Hanley, 1844) (Lamprell & Whitehead, 1992: pl. 69, fig. 541; M. Huber, pers. comm., 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

***effossa, Cytherea** – Hanley, 1843a: 123; 1843b: 109. Loc. unknown. Attributed to Reeve in Sherborn (1926: 2080). The Indo-Pacific *Sunetta effosa* (Hanley, 1843) (Oliver, 1992: 184, pl. 42, fig. 7a, b; Hylleberg & Kilburn, 2003: 219). Leeds Museum 1957.173.24640, two possible syntypes (33.7 mm x 23.3 mm; 26.9 mm x 18.9 mm) (with note in collection by S. Whybrow (Morris), “neither of these 2 appears to be the figured specimen”) (Sept. 1979)).

excavata, Cytherea – Hanley, 1843a: 123; 1843b: 109. Loc. unknown. Attributed to Reeve in Sherborn (1926: 2262). *Non Cytherea excavata* Morton, 1833. Hanley’s species does not appear to have been renamed. Leeds Museum 1957.173.24641, syntypes (three valves, largest 21.0 mm x 16.4 mm).

hindsii, Cytherea – Hanley, 1844e: 110; 1844g: pl. 15, fig. 35; 1846c: 11 (pl. expl.); 1856a: 356. Guayaquil [Ecuador]; Cuming & Hanley colls. Synonym of the tropical eastern Pacific *Tivela (Tivela) byronensis* (Gray, 1838) (Coan & Valentich-Scott, 2012: 829–831). NHMUK 20120193, three syntypes; Leeds Museum 1957.173.24671, possible syntype (24.1 mm x 26.7 mm).

***lacerata, Venus** – Hanley, 1844g: pl. 16, fig. 23; 1845b: 161; 1846c: 13 (pl. expl.); 1856a: 360–361. Catbalonga [Philippine Islands];

Cuming & Hanley colls.; probably collected by H. Cuming. The Indo-Pacific *Periglypta lacerata* (Hanley, 1845) (Hylleberg & Kilburn, 2003: 217; Qi, 2004: 307, pl. 167, fig. C, as "1844") or *Antigona lacerata* (Hanley, 1845) (Pope, 2011a: pl. 1127, figs. 5, 6). Type material not found in NHMUK or Leeds Museum in 2012. NHMUK 196246 consists of one specimen (figured by Reeve 1863: pl. 6, fig. 18, but from Zebu, which is not the type locality and does not match Hanley's illustration).

Lucinopsis – Forbes & Hanley, 1848: 433–438. Type species by monotypy: *Venus undata* Pennant, 1777. Junior synonym of *Mysia* Lamarck, 1818, ex Leach ms, which has the same type species by monotypy.

****lyra, Venus*** – Hanley, 1845b: 161–162; 1844g: pl. 16, fig. 21; 1846c: 13 (pl. expl.); 1856a: 360. Gulf of Guinea, Rang; Cuming & Hanley collections. The west African *Venus lyra* Hanley, 1845 (Huber, 2010: 361). NHMUK 1907.10.28.114, syntype (32.5 mm x 28.5 mm) (bottom of box states "one of TYPES from Hanley coll." although this is not the figured specimen).

****magnifica, Venus*** – Hanley, 1845f: 21–22. Ticao [Philippine Islands]; on sand; H. Cuming; Cuming coll. *Antigona magnifica* (Hanley, 1845) from the Philippine Islands (Pope, 2011a: pl. 1128, figs. 1–4). NHMUK 196250, one syntype; NHMUK 1962177, two syntypes.

nivea, Cytherea – Hanley, 1843b: 97. Red Sea. Not listed in Oliver (1992); the white form of the Indian Ocean *Callista* (*Notocallista*) *umbonella* (Lamarck, 1818) (M. Huber, pers. comm., 20 Dec. 2011). NHMUK 1907.10.28.104, syntype (54.3 mm x 45.0 mm).

obliquata, Cytherea – Hanley, 1844e: 109; 1844g: pl. 15, fig. 24; 1846c: 11 (pl. expl.); 1856a: 355. Loc. unknown; Cuming & Hanley colls. The Indo-Pacific *Pitar obliquatus* (Hanley, 1844) (Qi, 2004: 299, pl. 163, fig. E). However, Lamprell & Healy (1997: 291, 293) had determined that it was a junior synonym of *Pitar* (*Pitarina*) *prora* (Conrad, 1837), based on examination of Hanley's type material. NHMUK 1912.6.4.14, syntype (49.0 mm x 44.4 mm, from "Philippines"). Hanley (1844e: 109) stated that this was in the "Mus. Cuming, Hanley, &c" making clear that there were multiple type specimens.

ovum, Cytherea – Hanley, 1844g: pl. 15, fig. 21; 1845f: 21; 1846c: 11 (pl. expl.); 1856a: 354–355. Loc. unknown; Malabar (1856a); Cuming & Hanley colls. Synonym of the

Indian Ocean *Meretrix casta* (Gmelin, 1791) (Hylleberg & Kilburn, 2003: 216; Huber, 2010: 389, 725). Leeds Museum 1957.173.756, syntype (27.7 mm x 20.3 mm); NHMUK 1912.6.18.13, possible syntype; NHMUK 1912.3.15.2–3, two possible syntypes.

****philippinarum, Cytherea*** – Hanley, 1844e: 110; 1844g: pl. 15, fig. 36; 1846c: 11 (pl. expl.); 1856a: 356. Philippine Islands; Cuming & Hanley colls. The Indo-Pacific *Lioconcha philippinarum* (Hanley, 1844) (Oliver, 1992: 186, pl. 40, fig. 4a, b; Hylleberg & Kilburn, 2003: 214). *Cytherea philippinarum* Hanley, 1844, is the type species of *Sulcilioconcha* Habe, 1951, by original designation. NHMUK 1912.6.18.20, lectotype (selected by Lamprell & Kilburn, 1999: 45, pl. 1, figs. c–e); NHMUK 1966346/1–7, six paralectotypes.

plebeia, Cytherea – Hanley, 1844e: 109–110; 1844g: pl. 15, fig. 37; 1846c: 1856a: 356. Catbalonga, Philippine Islands; Cuming & Hanley colls. Synonym of the western Indo-Pacific *Redicirce sulcata* (Gray, 1838) (Tomlin, 1923: 311; Huber, 2010: 382). NHMUK 1907.10.28.124, one syntype (26.4 mm x 24.2 mm).

****quoyi, Cytherea*** – Hanley, 1844g: pl. 15, fig. 25 (without caption); 1846c: 11 (pl. expl.). Australia. This species has to date from 1846, i.e., the publication of the explanation to pl. 15. The Australian *Circe* (*Circe*) *quoyi* (Hanley, 1846) (Huber, 2010: 385, as "1844"). NHMUK 1907.10.28.207, syntype (48.4 mm x 47.3 mm).

roborata, Venus – Hanley, 1844g: pl. 16, fig. 25 (without caption); 1845b: 161; 1846c: 13 (pl. expl.); 1856a: 361. Van Diemen's Land [Tasmania, Australia]; Hanley & Metcalfe colls. Synonym of the Australian *Placamen placidum* (Philippi, 1844) (Lamprell & Whitehead, 1992: pl. 62, fig. 469). Philippi's species is the type species by original designation of *Placamen* Iredale, 1925. NHMUK 1907.10.28.115, one syntype (20.6 mm x 21.2 mm).

****scabra, Venus*** – Hanley, 1844g: pl. 16, fig. 24 (without caption); 1845b: 161; 1846c: 13 (pl. expl.); 1856a: 361. Catbalonga, Philippine Islands; Cuming & Hanley colls.; probably collected by H. Cuming. The Indo-Pacific *Timoclea scabra* (Hanley, 1845) (Lyngø, 1909: 244; Hylleberg & Kilburn, 2003: 220–221; Qi, 2004: 309–310, pl. 168, fig. H, the first and last as "1844"). NHMUK 1907.10.28.134–135, two syntypes (Higo et al., 2001: 176, fig. B1140). Lamprell (2004: 4) stated that this lot was the "holotype," but as it has two

specimens, this was not a valid lectotype designation. (Higo et al., 2001, mistakenly used the number of a different type, that of *Venus subnodosa* Hanley.)

***sculpta, Artemis** – Hanley, 1844g: pl. 15, fig. 42 (without caption); 1845c: 12; 1846c: 11 (pl. expl.); 1856a: 357. “Australia?”; Hanley coll. The Australian *Dosinia sculpta* (Hanley, 1845) (Lamprell & Whitehead, 1992: pl. 70, fig. 555). Type material not found in NHMUK or Leeds Museum in 2012.

simplex, Artemis – Hanley, 1845c: 11; 1844g: pl. 15, fig. 41; 1846c: 11 (pl. expl.); 1856a: 357. Panama & Santa Elena [Guayas, Ecuador]; Cuming & Hanley colls.; probably collected by H. Cuming. Synonym of the tropical eastern Pacific *Dosinia dunkeri* (Philippi, 1844) (Coan & Valentich-Scott, 2012: 825–826). Type material not found in NHMUK or Leeds Museum in 2012.

***subnodulosa, Venus** – Hanley, 1844g: pl. 16, fig. 19 (without caption); 1845b: 160; 1846c: 12 (pl. expl.); 1856a: 360. San Nicolas, Philippine Islands; Cuming & Hanley colls.; probably collected by H. Cuming. The western Pacific *Timoclea subnodosa* (Hanley, 1845) (Lynge, 1909: 243, pl. 5, fig. 5, as “1844”; Hylleberg & Kilburn, 2003: 221, as “1843”; Qi, 2004: 309, pl. 168, fig. D, as “1844”). NHMUK 1907.10.28.17–19, three possible syntypes (Higo et al., 2001: 176, fig. B1144).

***subquadrata, Artemis** – Hanley, 1844g: pl. 15, fig. 39 (without caption); 1845c: 11–12; 1846c: 11 (pl. expl.); 1856a: 357. Santa Elena, West Colombia [Ecuador]; Cuming & Hanley colls.; probably collected by H. Cuming. The tropical eastern Pacific *Cyclinella subquadrata* (Hanley, 1845) (Coan & Valentich-Scott, 2012: 823–824). NHMUK 1998196/1, lectotype (selected by Coan, 2001: 352, fig. 6); NHMUK 1998196/2, paralectotype.

varians, Cytherea – Hanley, 1844e: 109; 1844g: pl. 15, fig. 33; 1846c: 11 (pl. expl.); 1856a: 356. Brazil. Synonym of the western Atlantic *Pitar fulminatus* (Menke, 1828) (Rios, 1994: 286, pl. 98, fig. 1403). NHMUK 1912.6.4.15, figured syntype. The NHMUK collection has an additional three specimens from the Cuming collection; type status uncertain.

lamarckii, Venus – “Hanley”, 1843b: 113, ex Gray ms. Red Sea. This was treated as a separate, non-Gray species by Petit (2012: 72). However, it appears to be the same taxon as *Dosina lamarckii* Gray, 1838 (p. 308). Syn-

onym of the widely distributed Indo-Pacific *Antigona lamellaris* Schumacher, 1817 (Fischer-Piette, 1975: 37–38, as *Venus*; Oliver, 1992: 180, pl. 38, fig. 2; Huber, 2012: 363).

Two taxa in G. B. Sowerby II’s *Thesaurus Conchyliorum* monograph of the genus *Tapes* (1852) were indicated as being by Hanley, one marked “ms”, the other not. Both should be considered as being by G. B. Sowerby II, ex Hanley ms, not as Hanley in Sowerby. These are: *Tapes indica* – p. 694, pl. 151, figs. 146, 147 – and *T. variegata* – p. 696, pl. 151, figs. 133–138. Petit (2009) attributed these to G. B. Sowerby II.

Solenidae

acinaces, Solen – Hanley, 1843e: 101. Loc. unknown. The species was published without a figure, so it remains a *nomen dubium* (M. Huber, 20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

brevis, Solen – Hanley, 1842b: 12–13, pl. 2, fig. 2, ex Gray ms; 1843f: 2 (Syst. List), [2] (expl. to pl. 2), 8 (expl. to pl. 13); 1843g: pl. 13, fig. 42; 1856a: 336. “American Seas”. Synonym of the Indo-Pacific *Solen vagina* Linnaeus, 1758 (Cosel, 1990: 299). *Solen brevis* Hanley, 1842, is the type species of *Fistula* Mörch, 1853, by the subsequent designation of Keen (1969), making *Fistula* a synonym of *Solen*, because *S. vagina* is its type species. Type material not found in NHMUK or Leeds Museum in 2012.

***cylindraceus, Solen** – Hanley, 1843e: 101; 1843g: pl. 12, fig. 41; 1844g: 7 (pl. expl.); 1856a: 337. Loc. unknown. The western Indian Ocean *Solen cylindraceus* Hanley, 1843 (Cosel, 1990: 297). Type material not found in NHMUK or Leeds Museum in 2012.

***guinensis, Solen** – Hanley, 1842b: 12, pl. 2, fig. 1, ex Gray ms; 1843f: 2 (Syst. List), [2] (expl. to pl. 2), 8 (expl. to pl. 13); 1843g: pl. 13, fig. 28; 1856a: 336. Loc. not stated. The west African *Solen guinensis* Hanley, 1842. Unnecessarily renamed as *S. guinaicus* by Cosel (1993: 217–220) on the grounds that it was preoccupied by *Solen guineensis* W. Wood, 1815, but the one-letter difference in the species names prevents homonymy – ICZN Code Arts. 57.6). A neotype for Hanley’s species was designated by Cosel: NHMUK 1994154 (73.8 mm x 14.7 mm, from Dixinn Port, Conakry Peninsula, Guinea).

niveus, Solen – Hanley, 1843g: pl. 12, fig. 40 (without caption); 1846c: 7 (pl. expl.); 1856a: 336. Loc. not stated. This species remains a *nomen dubium* (M. Huber, pers. comm.,

20 Dec. 2011). Type material not found in NHMUK or Leeds Museum in 2012.

***philippinarum, Solen** – Hanley, 1843e: 101; 1843f: 7 (pl. expl.); 1843g: pl. 12, fig. 42; 1856a: 337. Philippine Islands. Although listed by Hidalgo (2003: 18–19) from the Philippine Islands, this seems to have been based on a mislocalized specimen and is a senior synonym of the tropical eastern Pacific *Solena rudis* (C. B. Adams, 1852); Huber (2010: 665) determined that the specimen subsequently illustrated by G. B. Sowerby II (1874: fig. 21b–21c) was the same specimen described and illustrated by Hanley, so Huber selected that specimen as the lectotype, with the remaining specimens in that lot becoming paralectotypes. All are from “Tacloban” (Philippines), but Huber corrected the type locality to western Panama. NHMUK 20120175/1, lectotype (126.2 mm x 25.2 mm) (selected by Huber, 2010: 665); NHMUK 20120175/2–3, two paralectotypes.

***sloanii, Solen** – Hanley, 1842b: 12, ex Gray ms; 1843f: 2 (Syst. List), 5 (expl. to pl. 11); 1843g: pl. 11, fig. 18; 1856a: 336. Loc. not stated. The Southeast Asian and Philippine Islands *Solen sloani* Hanley, 1842 (Cosel, 1990: 298; 2011: pl. 1180, figs. 1, 2, who attributed this species to Gray; Li, 2004: 275, pl. 151, fig. G). NHMUK 1952.5.13.1, two syntypes (Higo et al., 2001: 169, fig. B902, as “Gray, 1842” and erroneously identified as the “lectotype”). Wilkins (1953b: 43), in his catalogue of the Hans Sloane collection, stated: “Holotype BM 1952.5.13.1,” but this was not a valid lectotype selection as there were two syntypes in that lot, from the Sloane collection and labeled as from “Pegu, Lower Burma.”

***thuelcha, Solen** – Hanley, 1842b: 13, pl. 2, fig. 3, ex d’Orbigny ms; 1843f: 2 (Syst. List), [2] (expl. to pl. 2), 3 (expl. to pl. 10); 1843g: pl. 10, fig. 30; 1856a: 336. South America. Overlooked by Sherborn because of its attribution to d’Orbigny, who never published it. The southwestern Atlantic *Solen thuelchus* Hanley, 1842 (Cosel, 1990: 300). Misspelled as *S. tehuelchus* by Rios (1994: 267), who also attributed the species to d’Orbigny. Type material not found in NHMUK or Leeds Museum in 2012.

Pharidae

***acuminatus, Solen** – Hanley, 1842b: 17, pl. 2, fig. 29; 1843f: 2 (Syst. List), [2] (expl. to pl. 2), 5 (expl. to pl. 11); 1843g: pl. 11, fig. 35; 1856a: 336. The Indian Hooghley River, western

India [West Bengal]. Attributed to Reeve in Sherborn (1922: 57). Interpreted as *Pharella acuminata* (Hanley, 1842) (Huber, 2010: 669). NHMUK 20120174, three possible syntypes (Mus. Cuming, from Hooghley River; however, the tablet also lists “Singapore” which may have been added later).

***theobaldi, Novaculina gangetica** var. – Hanley & Theobald, 1874: 48, pl. 116, fig. 10, ex Benson ms. Tenasserim River, Pegu [Bago], Burma. This subspecies was never described by Benson, and it was not mentioned by Preston (1915). It might either be a synonym of *N. gangetica*, or it might well be a valid species, because species of *Novaculina* may have narrowly restricted distributions. Type material not found in NHMUK or Leeds Museum in 2012.

Myidae

***semistriata, Mya** – Hanley, 1842b: 20, pl. 2, fig. 42; 1843d: 6–7; 1843f: 3 (Syst. List), [2] (expl. to pl. 2), 3 (expl. to pl. 10); 1843g: pl. 10, fig. 16. Loc. unknown. The southeast Asian *Cryptomya* (*Venatomya*) *semistriata* (Hanley, 1842) (Zhang et al., 2012: 51). NHMUK 20120167, syntype (one broken valve).

Corbulidae

pygmaea, Corbula – Hanley, 1843f: 7 (pl. expl.); 1843g: pl. 12, fig. 34; 1856a: 344–345. Loc. not stated. The species dates from 1843g when the earlier plate explanation came to correspond with a published figure. Huber (2010: 771, as “1856”) treated this as a *nomen dubium*. *Corbula pygmaea* H. Adams, 1873, is a junior homonym. NHMUK 20120173, figured syntype (Cuming coll.).

quadrata, Corbula – “Hanley”, 1843f: 6 (Syst. List), 7 (expl. to pl. 12); Hinds, 1843: 57; Hanley, 1843g: pl. 12, fig. 36. The eastern Pacific and western Atlantic *Basterotia quadrata* (Hinds, 1843) (Coan & Valentich-Scott, 2012: 452–454, as “Hanley”). This name was credited to Hanley in the mistaken belief that it was made available by Hanley in early 1843. However, it was a *nomen nudum* in Hanley’s publications until the corresponding figure was published in “late” 1843; without an exact date, this has to be considered to have been at the end of the year, whereas the Hinds description can be dated as November 1843, and thus takes precedence. *Corbula*

quadrata “Hanley” Hinds, 1843, is type species of *Harlea* Gray, 1842; declared a *nomen oblitum* by Petit (2012: 100). Type material not found in NHMUK or Leeds Museum in 2012 for specimens of either Hinds or Hanley.

Pholadidae

clausus, Pholas – Hanley, 1842b: 6, pl. 1, fig. 34, ex Gray ms; 1843f: [1] (Syst. List), [1] (expl. to pl. 1), 4 (expl. to pl. 11); 1843g: pl. 11, fig. 8; 1856a: 336. Africa. Originally as “Gray in Bowdich” and repeated as such, but not a Gray species (Petit, 2012: 63). Synonym of the west African *Talona explanata* (Spengler, 1792) (Tryon, 1862: 207) (figured in Huber, 2010: 475). *Pholas clausa* Hanley, 1842, is the type species of *Talona* Gray, 1842, by the subsequent designation of Gray (1847). NHMUK 1952.10.30.168, syntype.

Teredinidae

****megotara, Teredo*** – Hanley, in Forbes & Hanley, 1848: 77–80, pl. 1, fig. 6, pl. 18, figs. 1, 2. Herne Bay, Kent; Torbay; Exmouth; Swansea Bay; Broadstairs [all United Kingdom]. This was presented as a new, more appropriate name for *Teredo nana* Turton, 1822, which Hanley felt was based on juvenile material. The type material for Turton’s species is in the USNM, and Turner (1966: 112) considered it too fragmentary to identify and Turton’s name thus a *nomen dubium*. Turner (1966: 110) misdated the text of Forbes & Hanley’s account as 1853. This is now regarded as the North Atlantic *Psiloteredo megotara* (Hanley, in Forbes & Hanley, 1848) (Turner, 1966: 110, pl. 25A, B). *Teredo megotara* Hanley, in Forbes & Hanley, 1848, is the type species of *Dactyloteredo* Moll, 1952, by original designation. NHMUK 1907.10.28.34, lectotype (selected by Turner, 1966: pl. 25A); NHMUK 1907.10.28.35, paralectotype.

utriculus, Teredo – “Hanley”, 1882a: 541, pl. 12, figs. 9–12; 1885a: 25–26. Cannes, France; from a shipwreck. “Non *T. utriculus* Gmelin, 1791”. Turner (1966: 128) interpreted Hanley’s taxon as a new species, with the earlier one by Gmelin being a *nomen dubium*, but because Hanley specifically referred to Gmelin, it is more appropriate to consider Hanley’s citation as a misidentification of

the earlier taxon, not a new homonymous species. Hanley’s own material was *Nototeredo norvagica* (Spengler, 1792). NHMUK 1907.12.30.589–591, Hanley’s specimens (four valves, two pallets, and two long tubes, all from Cannes, France) (figured by Turner, 1966: pl. 24, fig. E, but erroneously labeled as “holotype”).

Thraciidae

elongata, “Osteodoma” – Hanley, 1842b: 25, ex Gray ms; 1843b: pl. 3, fig. 16; 1843f: [3] (expl. to pl. 3), 8 (expl. to pl. 13); 1843g: pl. 13, fig. 27. Mediterranean. Synonym of *Lyonsia norvegica* (Gmelin, 1791) (Sabelli et al., 1990: 340). Type material not found in NHMUK or Leeds Museum in 2012.

Osteodoma – “Hanley”, 1842b: 24. Error pro *Osteodesma* Deshayes, 1825.

Periplomatidae

obtusa, Periploma – Hanley, 1842b: pl. 2, fig. 50 (without caption); 1843f: 3 (Syst. List), [2] (expl. to pl. 2, with descriptive footnote for this species), 8 (expl. to pl. 13); 1843g: pl. 13, fig. 50. America: “California?”. This species, which dates from the appearance of the explanation to pl. 3 in 1843f, is a synonym of the eastern Pacific *Periploma* (*Periploma*) *planusculum* G. B. Sowerby I, 1834 (Coan & Valentich-Scott, 2012: 994–995). NHMUK 1968360, holotype (46.2 mm x 32.5 mm). Hanley (1843f: [2]) stated “The shell from which this figure was copied,” indicating that the species was based on a unique specimen.

Pandoridae

****cumingii, Pandora*** – Hanley, 1861d: 272. Samar & Negros, Philippine Islands; in soft sand; H. Cuming. NHMUK 1964466, three syntypes.

GASTROPODA Haliotidae

sanguinea, Haliotis – Hanley, 1840 & 1842a: viii (fig. caption), 60 (description), frontispiece, fig. 5. This species was noted by Tomlin (1945:

91). Synonym of the South African *Haliotis spadicea* Donovan, 1808 (Geiger, 2000: 84–85, pl. 14, text fig. 70; Geiger & Owen, 2012: 126–127). NHMUK 1912.6.18.31, syntype (48.1 mm x 30.7 mm).

Fissurellidae

rosea, *Emarginula* – “Hanley”, 1844a: xxxii. Listed by Sherborn (1930: 5549) as also having been proposed by Hanley, but this is the species first made available by Bell (1824) (Forbes & Hanley, 1849: 479). This eastern Atlantic species was discussed and figured in Fretter & Graham (1976: 9–10, fig. 6).

Lepetidae

Pilidium – Forbes & Hanley, 1849: 440–442. *Non Pilidium* J. Müller, 1846 (Nemertea). Type species by monotypy: *Patella fulva* O. F. Müller, 1776. Synonym of *Iothia* Forbes, 1849, which has the same type species (Warén et al., 2011).

****Propilidium*** Forbes & Hanley, 1849: 443–445. Type species by monotypy *Patella ancyloides* Forbes, 1840. A valid genus (Keen, 1960: 236; Fretter & Graham, 1976: 34–36).

Neritidae

coluber*, *Nerita – Hanley & Theobald, 1875: 64, pl. 157, fig. 10, ex Thorp ms. Ceylon. Status uncertain. Tryon (1888: 53, pl. 17, fig. 78) transferred this to *Neritina*, without explanation. Species not included in Eldredge (1987). Probably a junior synonym of *Clithon oualaniensis* (Lesson, 1831) (C. Krijnen, pers. comm., 12 Aug. 2012). That polymorphic species is widely distributed across South Asia, and the color pattern of Hanley & Theobald's figured specimen falls within the range of color variation of *C. oualaniensis*, as documented by Grüneberg (1976, 1982). Type material not found in NHMUK or Leeds Museum in 2012.

Ampullariidae

****cerasum*, *Ampullaria*** – Hanley, 1854: *Ampullaria* pl. 2, fig. 7 (expl. on unnumbered p.). No loc. stated. *Pomacea cerasum* (Hanley, 1854), from Tabasco, Mexico (Cowie & Thiengo, 2003: 59; Thompson, 2011: 22). NHMUK 1907.10.28.225, syntype (24.3 mm x 22.4 mm).

****dysoni*, *Ampullaria*** – Hanley, 1854: *Ampullaria* pl. 2, fig. 5 (expl. on unnumbered p.). Honduras. *Pomacea flagellata dysoni* (Hanley, 1854) (Cowie & Thiengo, 2003: 62; Thompson, 2011: 23). NHMUK 1907.11.21.65, syntype (57.7 mm x 51.9 mm).

***fasciata*, *Ampullaria globosa* var.** – Hanley & Theobald, 1874: 46, pl. 113, fig. 5. Moradabad [India], *non Ampullaria fasciata* Reeve, 1856. Synonym of *Pila globosa* (Swainson, 1822) (Prashad, 1923: 587, as *Pachylabra*). See also Subba Rao (1989: 58); Ramakrishna & Dey (2007) made no mention of Hanley & Theobald's name. Type material not found in NHMUK or Leeds Museum in 2012.

***sphaerica*, *Ampullaria globosa* var.** – Hanley & Theobald, 1874: 46, pl. 113, fig. 4. Moradabad [India]. Synonym of *Pila globosa* (Swainson, 1822) (Prashad, 1923: 587, as *Pachylabra*). See also Subba Rao (1989: 58); Ramakrishna & Dey (2007) made no mention of Hanley & Theobald's name. Type material not found in NHMUK or Leeds Museum in 2012.

****theobaldi*, *Ampullaria*** – Hanley, in Hanley & Theobald, 1874: 47, pl. 115, fig. 2; Hanley, 1876: 605–606; “Birmah? or Pegu? the precise locality was mislaid” (Hanley & Theobald, 1874); Bhamao, Birmah; Theobald; Hanley coll. (Hanley, 1876). The Indian *Pila theobaldi* (Hanley, in Hanley & Theobald, 1874) (Prashad, 1923: 589, as *Pachylabra*). *Pila theobaldi* (Hanley, 1874) (Subba Rao, 1989: 60; Ramakrishna & Dey, 2007: 104). Mentioned from “Martaban” and “Moulmain” by Theobald (1876: 13, 52a). NHMUK 1907.10.28.1, possible syntype (69.2 mm x 73.7 mm) (The description makes clear that this was described from a single specimen, but there is a note with this lot, “specimen smaller than fig. in Conch. Ind.”, and the original size was given as 3.5 inches, corresponding to 90 mm).

swainsoni*, *Ampullaria – “Hanley,” 1854: *Ampullaria* pl. 1, figs. 1, 4. Alderson (1926) renamed this species *Ampullaria hanleyana* on the grounds that it was a junior homonym of *Ampullaria swainsoni* Philippi, 1852. However, because Hanley captioned his figure as “*Ampullaria swainsoni* of Philippi”, Alderson's taxon cannot be taken as the renaming of a homonym, but rather has to be interpreted as a new species based on Hanley's figure (Cowie & Thiengo, 2003: 66).

Cyclophoridae

anguis, *Cyclophorus stenostoma* var. – Hanley & Theobald, 1875: 43, pl. 105, fig. 9. Top of the Nilgherries. Synonym of *Theobaldius stenostoma* (G. B. Sowerby I, 1843) (Kobelt, 1902: 96; Gude, 1921: 43, as a variety; Ramakrishna et al., 2010: 46 (entry for *stenostoma* mentions that “Hanley & Theobald named a variety *anguis* also from Nilgris,” indicating that they regarded it a synonym). Type material not found in NHMUK or Leeds Museum in 2012; NHMUK has two uncatalogued specimens from the Nilgherries, ex H. Cuming, but not indicated as types or as from the Hanley collection.

assamensis, *Pterocyclos parvus* var. – Hanley & Theobald, 1875: 56, pl. 5, fig. 3. Khasia Hills: Assam. The illustrated specimen was originally identified as *P. parvus* by Hanley & Theobald (1870: 3, pl. 5, fig. 3), then later described as a new variety. Synonym of *Pterocyclos parvus* (Pearson, 1833) (Kobelt, 1902: 167; Gude, 1921: 109; Ramakrishna et al., 2010: 78, as a variety). Type material not found in NHMUK or Leeds Museum in 2012.

conica, *Cyclophorus tryblum* var. – Hanley & Theobald, 1872: 22, pl. 47, fig. 10. No locality; nominal species is from “Darjiling; Sikkim Himalayah.” Synonym of *Cyclophorus* (*Glossostylus*) *tryblum* Benson, 1854 (Kobelt, 1902: 120, as a synonym; Gude, 1921: 68–69, as a variety). Ramakrishna et al. (2010: 24–25) only mentioned *tryblum*, but not *conica*. Type material not found in NHMUK or Leeds Museum in 2012.

fulgurans, *Cyclophorus arthric[us]* var. – Hanley & Theobald, 1870: 2, pl. 3, fig. 2. [No locality; nominotypical name corrected to *arthriticus* by Hanley & Theobald, 1876: xv]. Synonym of *Cyclophorus* (*Salpingophorus*) *arthriticus* Theobald, 1864 (Kobelt, 1902: 124–125, as a synonym; Gude, 1921: 70, as a variety). Type material not found in NHMUK or Leeds Museum in 2012.

margarita, *Alycaeus – Hanley & Theobald, 1874: 39, pl. 95, fig. 10 [not pl. 97, fig. 7]; ex Theobald ms. Shan Provinces. *Alycaeus* (*Cycloryx*) *margarita* Hanley & Theobald, 1874 (Kobelt, 1902: 347; Gude, 1921: 211–212). The specimen figured on pl. 97, fig. 7 is *Alycaeus sculptilis* Benson, 1856 (*fide* Theobald, 1876: 52a; Godwin-Austen, 1914: 416). Type material not found in NHMUK or Leeds Museum in 2012.

mastersi, *Pterocyclos (Spiraculum) – Hanley & Theobald, 1870: 3, pl. 5, fig. 1, ex Blanford ms. Assam. “Golahgat, Assam” (*fide* Theobald, 1876: 38). *Pearsonia* (*Pearsonia*) *mastersi* (Hanley & Theobald, 1870) (Kobelt, 1902: 174; Gude, 1921: 120–121; Mitra et al., 2005: 85–86). Type material not found in NHMUK or Leeds Museum in 2012; NHMUK has two lots from the Blanford collection (one specimen from Assam, and three from the Naga Hills), but these specimens do not match the illustration and are probably not types.

ophis, *Cyclophorus – Hanley, 1876: 605; Hanley & Theobald, 1876: 57, pl. 144, fig. 6. Tenasserim; Theobald coll. *Cyclophorus* (*Salpingophorus*) *ophis* Hanley, 1876 (Kobelt, 1902: 130; Gude, 1921: 81). Type material not found in NHMUK or Leeds Museum in 2012.

picta, *Cyclophorus affinis* var. – Hanley & Theobald, 1874: 42, pl. 104, fig. 1. No locality. *Cyclophorus* (*Cyclophorus*) *affinis* Theobald, 1857 (Kobelt, 1902: 135; Gude, 1921: 89, both as a variety); Ramakrishna et al. (2010: 19) only mentioned *affinis* but not *picta*). Type material not found in NHMUK or Leeds Museum in 2012.

serratizona, *Cyclophorus – Hanley & Theobald, 1876: 57, pl. 144, fig. 7, ex Thorp ms. “Upper” Salwen (collected by Theobald). *Cyclophorus* (*Salpingophorus*) *serratizona* Hanley & Theobald, 1876 (Gude, 1921: 77). Theobald (1876: 53a) stated that the word “Upper” should be deleted from the type locality. Type material not found in NHMUK or Leeds Museum in 2012.

Viviparidae

ecarinata, *Paludina ceylanica* var. – Hanley & Theobald, 1874: 47, pl. 115, fig. 9. “Common in Ceylon.” A synonym of *Bellamya ceylonica* (Dohrn, 1857) (Starmühlner, 1974: 114). Preston (1915: 90) noted the type specimen was lost; type material not found in NHMUK or Leeds Museum in 2012.

listeri, *Paludina* – Forbes & Hanley, 1850: 8–11, pl. 71, fig. 16; 1852: 261. “Chiefly confined to the southern half of England” [many localities mentioned]. Synonym of *Viviparus contectus* (Millet, 1813) (Fretter & Graham, 1978a: 109–111, fig. 105). Type material not found in NHMUK or Leeds Museum in 2012.

Seven species in Reeve's *Conchologia Iconica* monograph of the genus *Paludina* (1862–1863) were based on Hanley manuscript names in the Cuming collection and should be treated as “Reeve, ex Hanley ms”, not as “Hanley in Reeve”. These include: *Paludina ampullarioides* – pl. 6, fig. 30; *P. cumingii* – pl. 3, fig. 11; *P. filosa* – pl. 6, fig. 31; *P. intermedia* – pl. 9, fig. 57; *P. thersites* – pl. 9, fig. 49; *P. viridis* – pl. 4, fig. 20; and *P. zonata* – pl. 6, fig. 34.

Pachychilidae

aspera, *Melania variabilis* var. – Hanley & Theobald, 1874: 44, pl. 109, fig. 6, ex Benson ms. Hindostan. Synonym of the southeast Asian *Brotia costula* (Rafinesque, 1833) (Köhler & Glaubrecht, 2006: 178). Hanley & Theobald (1874: 44) incorrectly cited “Benson 543, pl. 31, f. 12, 15.” This was a garbled citation of the treatment of *Melania variabilis* Benson, 1836 [*non* Defrance, 1823], in Souleyet (1852: 545, pl. 31, figs. 12–15). Leeds Museum 1957.173.1863, figured syntype (46.8 mm x 17.2 mm).

cincta, *Melania variabilis* var. – Hanley & Theobald, 1874: 44, pl. 109, fig. 5, ex Benson ms. Assam “(fide Bacon)”, *non* *Melania cincta* I. Lea & H. C. Lea, 1850 (India). Synonym of the Southeast Asian *Brotia costula* (Rafinesque, 1833) (Köhler & Glaubrecht, 2006: 178). NHMUK 1907.12.30.177, figured syntype (57.1 mm x 16.5 mm).

fimbriata, *Melania* – Hanley, 1854: Melaniadae pl. 4, fig. 32 (with expl. on unnumbered p.), ex Thorp ms. No loc. provided. Brot (1860: 110) treated this as a junior synonym of *Melania aspirans* Hinds, 1844; however, *M. aspirans* is now considered to belong to the Thiariidae, not the Pachychilidae, so the status of Hanley's species remains unresolved (M. Glaubrecht, pers. comm. 1 Aug. 2012). Type material not found in NHMUK or Leeds Museum in 2012.

fusiformis, *Melania baccata var. – Hanley & Theobald, 1873: 32, pl. 75, fig. 2. Shan States. Listed as valid in Preston (1915: 26). NHMUK 1907.12.30.210, figured syntype (63.0 mm x 25.1 mm).

“*Goliah*”, *Melania* – In 1873, Hanley & Theobald (1873: 31, pl. 72, fig. 3) wrote: “We had proposed the name of *Goliah* for this magnificent species, but . . . we defer the naming of it until the next part of our publication.” Three years

later, Hanley & Theobald (1876: 61, pl. 153, fig. 1), instead treated this as a synonym of *Melania reevei* Brot, 1862; and stated that: “the type in the British Museum is an immature form of the shell we had intended to call *Goliah* (pl. 72, f. 3) . . .” This name was thus not ever formally proposed, and was printed with a capital letter, in plain text, and not Latinized (in this work the Latin taxa were printed in boldface). As such, the specimen in NHMUK 1907.12.30.23, labeled as “holotype” (71.8 mm x 32.7 mm) (specimen figured on pl. 72, fig. 3), has no type status.

imbricata, *Melania reevei* var. – Hanley & Theobald, 1876: 61, pl. 153, fig. 4. Locality not stated. Synonym of *Brotia herculea* (Gould, 1846) (Köhler & Glaubrecht, 2006: 192) from Thailand. Type material not found in NHMUK or Leeds Museum in 2012.

limborgi, *Melania – Hanley, 1879: 580. Mulé-it Range, Tenasserim [Burma]; Limborg. Preston (1915: 29–30, fig. 2) listed this as *Tiara (Pachychilus) limborgi*, and illustrated the “type” specimen (his fig. 2), but this is not a valid lectotype designation as the original description referred to “specimens” and “all the examples” of this species. NHMUK 1907.10.28.228–229, syntypes (2 shells from Tenasserim, one illustrated by Preston); NHMUK 1905.03.7.1, syntypes (2 shells from Moulmein, Tenasserim, ex Godwin-Austen).

peguensis, *Melania reevei* var. – Hanley & Theobald, 1873: 31, pl. 72, fig. 6, ex Anthony ms. Pegu. Hanley & Theobald (1876: xvi, footnote 11) explained that they had initially believed that Anthony had published this species in the *American Journal of Conchology*, but they subsequently realized that it was merely “a manuscript species.” Preston (1915: 22), listed it as var. of *Tiara (Melanoides) gloriosa* (Anthony, 1865). Köhler & Glaubrecht (2006: 192) listed it as a *nomen nudum*, but they cited Hanley & Theobald's figure, showing that it was made available. It is presumably a synonym of *Brotia herculea* (Gould, 1846). NHMUK 1907.12.30.25, figured syntype (75.3 mm x 25.8 mm).

sowerbii, *Melania herculea var. – Hanley & Theobald, 1874: 44, pl. 109, fig. 7, ex Gould ms. Tenasserim [Burma]. NHMUK 1907.12.30.176, probable syntype (71.8 mm x 27.3 mm) (slightly smaller than illustrated specimen).

spinosa, *Melania* – Hanley, 1854: Melaniadae pl. 1, fig. 7, ex Benson ms; Hanley & Theobald, 1873: 32, pl. 75, fig. 6. *Non* *M.*

spinosa Gray, 1824. River Jumna, Sylhet, British India [Chittagong Province, Bangladesh]. Synonym of the southeast Asian *Brotia costula* (Rafinesque, 1833) (Köhler & Glaubrecht, 2006: 178). NHMUK 1907.10.28.79, lectotype (selected by Köhler & Glaubrecht, 2002: 148); NHMUK 1907.10.28.80, paralectotype.

lanceolata, *Melania reevei* var. – “Hanley & Theobald, 1876”. This subspecies was first described by Nevill (1885: 248–249), who cited Hanley & Theobald (1876: pl. 153, fig. 1) for the illustration. Preston (1915: 23) erroneously attributed this species name to Hanley & Theobald, not to Nevill.

schomburgki, *Melania* – “Hanley”. Reeve, 1859: pl. 14, fig. 93, ex Hanley ms. This species was indicated by Reeve as having been taken from a Hanley manuscript. Locality unknown; Cuming collection.

Paludomidae

melanostoma*, *Paludomus – Hanley & Theobald, 1875: 49, pl. 121, figs. 8–9, ex Thorpe ms. Ceylon [Sri Lanka]. Synonym of *Paludomus* (*Tanalia*) *neritoides* Reeve, 1847 (Starmühlner, 1974: 150; 1977: 263). NHMUK 1907.12.30.85, figured syntype (25.1 mm x 21.6 mm).

****monile*, *Paludomus*** – Hanley & Theobald, 1874: 44, pl. 108, fig. 10, ex Thorpe ms. Southern India. A *Paludomus* of unresolved status. Preston (1915: 48) and Satyamuri (1960: 48–49) considered it a valid species; Theobald (1876: 9) considered it a synonym of *P. chilinoides* Reeve, 1847; and Brot (1880: 43–44) considered it a synonym of *P. obesus* Philippi, 1847. NHMUK 1907.10.28.91, figured syntype (12.4 mm x 9.2 mm).

Thiaridae

****jugicostis*, *Melania*** – Hanley & Theobald, 1874: 45, pl. 110, figs. 8, 9, ex Benson ms. Tenasserim River. Listed as valid by Preston (1915: 28–29). *Melanoides jugicostis* (Hanley & Theobald, 1874) (Brandt, 1974: 166–167, 368, pl. 12, fig. 13) from the Tenasserim River, Burma. Now classified in the Thiaridae (M. Glaubrecht, pers. comm., 1 Aug. 2012). Type material not found in NHMUK or Leeds Museum in 2012.

Littorinidae

fairbanki*, *Cremnoconchus – Hanley & Theobald, 1876: 58, pl. 146, fig. 7, ex Blanford ms; Blanford, 1881: 221. Locality not stated. Junior synonym of *Cremnoconchus canaliculatus* Blanford, 1870 (D. Reid, pers. comm., 25 June 2012). Type material not found in NHMUK or Leeds Museum in 2012.

gracilior*, *Lacuna – Hanley, 1844a: viii, xxxviii, fig. 86, ex Metcalfe ms; Forbes & Hanley, 1850: 63–67, as a synonym of the eastern Atlantic *Lacuna vincta* (Montagu, 1803). Type material not found in NHMUK or Leeds Museum in 2012.

patula*, *Littorina – Thorpe, 1844: 259; Hanley, 1844a: [v], xxxix, fig. 7. Thorpe (1844: 259) had a description, and credited the name to Jeffreys, but it is not a known Jeffreys taxon (Warén, 1980: 21). In Hanley's Systematic Index, no description was present, and Thorpe's species was listed as a questionable variety of *Littorina rudis* (Maton, 1797) [now considered to be a synonym of *L. saxatilis* (Olivi, 1792)], suggesting that Hanley doubted its validity. Reid (1996: 264, 265) treated this taxon as a *nomen dubium* to ensure stability and to preserve the name *Littorina arcana* Hannaford Ellis, 1978. There is no known type material of Thorpe's species, and new material from the type locality was found to consist of a mixture of *Littorina saxatilis* and *L. arcana* (Hannaford Ellis, 1979: 52–53). The figure in Thorpe's book is insufficient to establish the identity of the species, because for these species of *Littorina*, information on reproductive mode is required for unequivocal identification (Hannaford Ellis, 1979; Reid, 1996). Thorpe's species is a senior homonym of *L. patula* Gould, 1849. The name *Littorina keenae* Rosewater, 1978, is the replacement name now in use for Gould's name.

Pomatiidae

partioti*, *Cyclostoma – Hanley, 1858f: *Cyclostoma* pl. 5, fig. 110 (expl. on unnumbered p.), ex Thorpe ms. No locality stated. *Non Cyclostoma* (*Pomatias*) *partioti* Saint-Simon, 1848, the latter now *Cochlostoma partioti* (Saint-Simon, 1848), which occurs in the Pyrenees. Type material not found in NHMUK or Leeds Museum in 2012.

****sowerbyi*, *Cyclostoma*** – Hanley, 1858f: *Cyclostoma* pl. 5, fig. 141 (expl. on unnumbered

p.). No loc. stated. Hanley speculated that the specimen he figured might be *C. bourcier* Pfeiffer, 1854 (p. 151), from Ecuador (which he misspelled as “*bouciera*”), but in case it was not that, the name *sowerbyi* was offered. Type material not found in NHMUK or Leeds Museum in 2012.

valvatoides, *Cyclostoma – Hanley, 1858f: *Cyclostoma* pl. 1, figs. 21, 22 (expl. on un-numbered p.), ex Thorpe ms. No loc. stated. Type material not found in NHMUK or Leeds Museum in 2012.

Naticidae

australis, “*Sicaretus*” [sic; *Sigaretus*] – Hanley, 1840 & 1842: viii (figure caption), 57–58, frontispiece, fig. 3. South Seas. Hanley's (1842a: 153) Index credited this species to “Gray”, but it is not a Gray species. This species was overlooked by both Tomlin (1945) and by Sherborn. Synonym of the Indo-Pacific *Sinum laevigatus* (Lamarck, 1822) according to Tryon (1886: 55, pl. 24, fig. 50). NHMUK 1907.10.28.125, figured syntype.

Rissoidae

beanii, *Cingula – Hanley, 1844a: vi, xli–xlii, fig. 43 – on p. vi as “*Rissoa (Cingula)*”; Forbes & Hanley, 1850: 84–86, pl. 79, figs. 5, 6; 1852: 263, both as *Rissoa beanii*. Scarborough, U.K. *Alvania beanii* (Hanley, 1844) (Fretter & Graham, 1978b: 173–175, fig. 148, as “*beani* Thorpe”; Sabelli et al., 1990: 149; S. M. Smith & Heppell, 1991: 18; Warén, 1996: 225, fig. 17D, H). Type material not found in NHMUK or Leeds Museum in 2012.

calathus, *Rissoa* – Forbes & Hanley, 1850: 82–84, pl. 78, fig. 3. Herm, Hanley; Shellness, Kent, & Whitesand Bay, Jeffreys; Penzance, 15–20 fms. [27–55 m], M'Andrew & Forbes; Mizen Head, 50 fms. [91 m], M'Andrew; Kilkee, Clare, Ireland, W. Thompson, collected by Mr. Warren. Synonym of *Alvania beanii* (Hanley, 1844) (Fretter & Graham, 1978: 173; Sabelli et al., 1990: 149), or as a subspecies thereof (S. M. Smith & Heppell, 1991: 18, attributed to Hanley alone). SMNH 3868, syntypes. Additional type material not found in NHMUK or Leeds Museum in 2012. USNM 183454 (one specimen) is from Hanley, but without locality or indication that it might be a type specimen. USNM 183434, from the Jeffreys collection, is labeled as the “figured type,” but this is merely the specimen figured

by Jeffreys in his *British conchology* (1869: pl. 66, fig. 4).

scalariformis, *Rissoa* – Hanley, 1844a: viii, xlii, fig. 89, ex Metcalfe ms (on p. viii as *Cingula*); Forbes & Hanley, 1850: 78–80, as a synonym of *Rissoa zetlandica* (Montagu, 1815). Herm, near Guernsey, U.K. Senior primary homonym of the tropical eastern Pacific *R. scalariformis* C. B. Adams, 1852, for which the synonymous *Rissoina firmata* (C. B. Adams, 1852) proved to be available. *Alvania zetlandica* (Montagu, 1815) was figured by Fretter & Graham (1978b: 180–182, figs. 154, 155). Type material not found in NHMUK or Leeds Museum in 2012.

abyssicola, *Rissoa* – “Forbes & Hanley”. This species was so listed by Norris & Dance (2002: 369), but this species was indicated as being by Forbes alone in Forbes & Hanley (1850: 856 – May; pl. 78, figs. 1, 2 – Feb.), as other authors have correctly used it in recent years (Fretter & Graham, 1978b: 188–190, figs. 162–164).

Assimineidae

***globularis, “*Cingula*?”** – Hanley, 1844a: viii, xlii, fig. 87, ex Metcalfe ms. Weymouth, U.K. This was listed as a synonym of *Boreocingula globulus* (Möller, 1842) (S. M. Smith & Heppell, 1991: 19), but this is unlikely because that species occurs only in southwestern Greenland (Warén, 1996: 214–215). Jeffreys (1869: 102) listed it as a synonym of *Paludinella littorina* (Della Chiaje, 1828), and indeed, *Cingula globularis* Hanley, 1844, is the oldest valid name for the type species of *Paludinella* L. Pfeiffer, 1841, which was established by the subsequent designation of Herrmannsen (1847) as “*Helix littorina* Delle Chiaie, 1828”. This species is now understood to have been intended by Pfeiffer to correspond to the concept of this species *sensu* Philippi (1841), that is, referable to the Assimineidae, and not the original concept of Delle Chiaie, which was referable to the Littorinidae (Kadolsky, 2012: 66–69; ICZN Code Art. 70.3). For a treatment of this assimineid species, but without mention of Hanley's taxon, see Fretter & Graham (1978a: 148–149, figs. 129, 130). Type material not found in NHMUK or Leeds Museum in 2012.

littorea, *Rissoa* – Forbes & Hanley, 1850: 132–134. Unjustified emendation of *Helix littorina* Della Chiaie, 1828 (fide Kadolsky, 2012: 69).

Bithyniidae

modesta, *Bythinia* – Hanley, 1859c: 240, ex Dohrn ms, *nomen nudum*. Ceylon.

Hydrobiidae

pellucida, *Cingula* – Hanley, 1844a: xliii–xliv, ex Bean ms; Forbes & Hanley, 1850: 140–141, as a synonym of *Rissoa ventrosa* (Montagu, 1803) based on a colorless specimen. Locality within the United Kingdom not stated. Figured by Fretter & Graham (1978a: 125–127, fig. 114), as *Hydrobia ventrosa*, now classified as the eastern Atlantic brackish water *Ecrobia ventrosus* (Montagu, 1803). Type material not found in NHMUK or Leeds Museum in 2012.

Lithoglyphidae

kingii, *Natica* – Forbes & Hanley, 1851: 343–344, pl. 101, figs. 1, 2. From the bottom of a boat that had been fishing a few miles off Cullercoats, Northumberland [United Kingdom], in the coralline zone, King. According to Jeffreys (1862: 70): “*Natica kingii* of Forbes and Hanley ... belongs to ... [the Paludinidae], and not to the Naticidae. It is ... *Lithoglyphus naticoides* ... [(C. Pfeiffer, 1828)], and inhabits the Danube. Professor King is said to have found the specimen (which is now in my collection) in the bottom of a fishing-boat at Cullercoats. How this Austrian and freshwater species could have got to the Northumberland coast, is very difficult to say. Professor King informs me that he never received any shells from the Danube, and that his statement as to the Northumbrian locality is perfectly correct. The question of the indigenesness and unaccountable habitat of this specimen must therefore remain a mystery.” Currently regarded as a synonym of *Lithoglyphus naticoides* (C. Pfeiffer, 1828). USNM 188241, holotype (6.2 mm x 5.3 mm).

Iravadiidae

**proxima*, *Rissoa* – Thompson, 1847: 174, ex Alder ms, *nomen nudum*; Forbes & Hanley, 1850: 127, pl. 75, figs. 7, 8, ex Alder ms; 1852:

264. Cork Harbour, Bantry Bay, Portmarnock and Dublin Bay, Ireland; Jeffreys. Type species by monotypy of *Ceratia* H. Adams & A. Adams, 1852. The western Atlantic *Ceratia proxima* (Forbes & Hanley, 1850) (Ponder, 1984: 52–54); figured as *Onoba proxima* by Fretter & Graham (1978b: 167–169, figs. 143, 144). NHMUK 1904.12.30.546–548, 2 syntypes, including figured specimen (a third specimen is missing as of June 2012).

Tonnidae

angusta, *Dolium variegatum* var. – Hanley, 1860b: 491. Locality not stated. Based on a figure in Reeve (1848: pl. x, fig. 7b). Junior synonym of *Tonna variegata* (Lamarck, 1802) (Vos, 2007: 103–104). NHMUK 1968305, possible holotype (86.9 mm x 65.4 mm).

**dunkeri*, *Dolium* – Hanley, 1860a: 431; 1860b: 490. Natal; Cuming coll. *Tonna dunkeri* (Hanley, 1860) (Kilias, 1962: 35; Vos, 2007: 93–94, pl. 41). NHMUK 1967677/1, lectotype (36.8 mm x 27.4 mm) (selected by Vos, 2007: 93); NHMUK 1967677/2–3, 2 paralectotypes.

favannii, *Dolium* – Hanley, 1860a: 430; 1860b: 490, as “*favannei*”. Locality unknown; Cuming coll. Unknown *Tonna* (Kilias, 1962: 36); synonym of the western Pacific *Tonna luteostoma* (Küster, 1857) (Vos, 2007: 96–97, pls. 43, 44, & 63, fig. 4. NHMUK 1967678, two syntypes (70.6 mm x 61.5 mm; 72.2 mm x 62.5 mm).

latesulcatum, *Dolium* – Hanley, 1860b: 489, ex Chemnitz (1777: 396, figs. 1072, 1082). Junior synonym of *Tonna allium* (Dillwyn, 1817) (Vos, 2007: 42). Type material presumably the specimen figured by Chemnitz.

picta, *Dolium latesulcatum* var. – Hanley, 1860b: 489. Locality not stated; Cuming coll. Junior synonym of *Tonna allium* (Dillwyn, 1817) (Vos, 2007: 42). Type material not found in NHMUK or Leeds Museum in 2012.

reevii, *Dolium* – Hanley, 1860b: 493. Locality unknown; Cuming coll. Synonym of the Indo-Pacific *Tonna lischkeana* (Küster, 1857) (Kilias, 1962: 26; Vos, 2007: 45–47, pls. 9, 10, & 60, figs. 1, 2, text fig. 11). NHMUK 196804, two syntypes (122.6 mm x 102.2 mm; 115.9 mm x 89.9 mm). Winckworth & Tomlin (1933: 212) had noted the existence of the syntypes but did not mention a catalogue number.

**tankervillii*, *Dolium variegatum* var. – Hanley, 1860b: 490–491. Locality not stated. *Tonna tankervillii* (Hanley, 1860), a valid

species from eastern Australia and the North Island of New Zealand (Vos, 2007: 102–103, pls. 50–52). Leeds Museum 1957.173.29077, holotype (108.1 mm x 84.6 mm). Vos (2007: 102–103) stated that the specimen in the Leeds Museum was the “lectotype.” However, the original description did not encompass multiple specimens, but instead referred to a specimen “now in my own possession.” As no other syntypes are known, this specimen is here treated as the holotype.

***tenebrosa**, *Dolium galea* var. – Hanley, 1860b: 488. Red Sea; Cuming collection & “elsewhere”. As a synonym of *T. galea* (Kiliass, 1962: 38); *Tonna tenebrosa* (Hanley, 1860) from the Red Sea (Vos, 2007: 65, pls. 28, 61). NHMUK 20060062, syntype. Vos (2007: 65) erroneously stated that this specimen was a “neotype,” but it is from the Cuming collection, and the original description refers to two specimens, including one from the Cuming collection (the other syntype was not found in NHMUK or Leeds Museum in 2012).

cumingii, *Dolium* – “Hanley”. Reeve, 1849: pl. 8, fig. 13, ex Hanley ms; Hanley, 1860b: 491, as “*Dolium cumingii* Hanley”. Reeve indicated that this was a Hanley manuscript name, and it is therefore not “Hanley in Reeve”, as some authors have had it. Philippine Islands; Cuming. A valid Indo-Pacific species of *Tonna* (Vos, 2007: 79–80, pl. 35 & pl. 62, figs. 2, 3, as “Hanley in Reeve”). Leeds Museum 1857.173.29073, lectotype (92.4 mm x 69.0 mm) (selected by Vos, 2007: 75); Leeds Museum 1857.173.29074, paralectotype (34.0 mm x 25.8 mm).

Epitoniidae

fragilis, *Scalaria* – Hanley, 1840 & 1842: viii (figure caption), 63 (text fig.). Type locality not stated. This species was listed by Tomlin (1945: 91) but not by Sherborn. Hanley's (1842a: 153) Index credited this species to “Gray”, but it is not a Gray species. Possible synonym of *Scalaria eburnea* Potiez & Michaud, 1838 (Tryon, 1887: 71, pl. 14, fig. 57), which may or may not be from the western Atlantic (Clench & Turner, 1951: 288). Not “*Scalaria fragilis* Hanley”, of G. B. Sowerby II, 1844, a synonym of a different western Atlantic species (Clench & Turner, 1951: 260–261). NHMUK 1907.10.28.81–84, four syntypes.

Janthinidae

britannica, *lanthina* – Forbes & Hanley, 1852: 260, ex Jeffreys ms, thence ex Leach ms. In synonymy with *I.* [= *Janthina*] *communis* Lamarck, 1822, now regarded as a synonym of *Janthina janthina* (Linnaeus, 1758) (Fretter & Graham, 1982: 392–393, fig. 279). It would not be an available name under ICZN Code Art. 11.6.

Eulimidae

gracilis, *Eulima distorta* var. – Forbes & Hanley, 1850: 233 (Aug.), pl. 92, fig. 6. Clyde. *Non Eulima gracilis* C. B. Adams, 1850 (April), nor *Eulimella acicula gracilis* Jeffreys, 1847. Synonym of the eastern Atlantic *Melania monterosatoi* (Monterosato, 1890, ex Boury ms), proposed as a new name for *Eulima distorta gracilis* “Jeffer.”, non *E. gracilis* C. B. Adams, 1850 (Warén, 1988: 19–20, figs. 11, 12). Discussed but not figured in Fretter & Graham (1982: 420–421, as “1853” and as *Polygireulima*). SMNH 3610, syntypes. Additional type material not found in NHMUK or Leeds Museum in 2012.

Cerithiopsidae

***Cerithiopsis** Forbes & Hanley, 1850: pls. OO, 91; 1851: 364. Type species by monotypy: *Murex tubercularis* Montagu, 1803. This genus was first made available in the plate captions (published in 1850), a year before the text was published.

***clarkii**, *Cerithiopsis* – Forbes & Hanley, 1851: 368, as “pl. 105, fig. 1”, but actually pl. 103, fig. 6. Exmouth; William Clark. Described as a possible synonym of *C. tubercularis* Montagu. Treated by Jeffreys (1867: 266–268) as an aberrant form of *C. tubercularis* with two rather than three rows of nodes; not mentioned by Fretter & Graham (1982: 366–368, figs. 257, 258) in their treatment of Montagu's species. On the other hand, Sabelli et al. (1990: 179) listed it in another genus of the Cerithiopsidae as *Dizoniopsis clarkii* (Forbes & Hanley, 1851). Type material lost in 1941 bombing of the Liverpool Museum (McMillan, 1997).

Buccinidae

***nassoides**, *Pseudoliva* – Hanley, 1860a: 430; Hanley & Theobald, 1876: xvi, footnote 9, in the Melanidae. Malabaricum [Malabar,

India]; Hanley coll. This is not a member of the Pseudolividae and thus was not listed in Vermeij (1998). Hanley & Theobald (1876) stated that this was a junior synonym of the brackish-water *Clea annesleyi* Benson, 1860 (pp. 258–259), then classified in the Melanoidae. However, Benson's description was published on 1 October 1860, while Hanley's description would have been published no later than February 1860, so Hanley's name has priority over Benson's. In 1876, Brot transferred *Clea* to the Buccinidae, as discussed by E. A. Smith (1895). NHMUK 1907.10.28.236–237, two syntypes (7.3 mm x 4.0 mm; 8.3 mm x 4.5 mm). Benson's type material is not present in the NHMUK. Hanley's syntypes are juveniles, and it remains to be determined whether this species belongs to *Clea* (Buccinidae) or *Nassodonta* (Nassariidae), both brackish-water taxa.

Harpidae

****ponderosa*, *Oniscia*** – Hanley, 1858e: 255–256, pl. 42, figs. 9, 10. Locality unknown; Cuming coll. The southwestern Pacific *Morum ponderosum* (Hanley, 1860) (Poppe et al., 1999: pl. 39, figs. 2–4). Type species by original designation of *Herculea* H. Adams & A. Adams, 1858, a synonym of *Morum*. NHMUK 1966724, lectotype (32.7 mm x 25.8 mm) (selected by Dance & Emerson, 1967: 94); NHMUK 1966725, paralectotype.

Herculea “Hanley” – Evidently based on a Hanley manuscript name, this generic name was made available by H. Adams & A. Adams (1858: 621).

Volutidae

Cochlycopa Hanley, 1841: 27 [not to be confused with *Cochlicopa* Férussac, 1821, a pulmonate, which has been misspelled by some authors as *Cochlycopa*]. Type species by monotypy: *Achatina maculata* Swainson, 1821. Described as a subgenus of *Achatina*, a terrestrial pulmonate from Africa. However, Hanley (1841: 27–28) also noted that the Danish malacologist H. H. Beck (1799–1863) concluded that this species “however, much in appearance it may resemble a land snail, is an operculated marine mollusc and found alive in the seas of Spain and Portugal,” and if

Beck was correct, “the *Cochlycopa maculata* must form a genus of which it is the sole species, akin on the one hand to *Struthiolaria*, on the other to certain *Buccinums*.” This genus is a junior synonym of *Ampulla* Röding, 1798, and *Halia* Risso, 1826, which have, through synonymy, the same type species (Sabelli et al., 1990: 210; ICZN Opinion 968, 1971).

Pseudolividae

****ancilla*, *Pseudoliva*** – Hanley, 1860a: 429–430. Caffrariam [Eastern Cape, South Africa]; Hanley coll. The South African *Fulmentum ancilla* (Hanley, 1859) (Vermeij, 1998: 60, 80). Type species of *Mariona* G. B. Sowerby III, 1890, by monotypy, and of *Sylvanocochlis* Melvill, 1903, by original designation, both synonyms of *Fulmentum* Fischer, 1884. NHMUK 1910.5.26.12, holotype (44.0 mm x 22.9 mm).

Mangeliidae

[formerly part of Turridae]

metcalfei*, *Pleurotoma – Hanley, 1844a: xlvii–xlviii, ex Reeve ms; Forbes & Hanley, 1851: 485–488, as a synonym of *Mangelia costata* (Pennant, 1777). Guernsey, U.K.; Metcalfe coll. Mistakenly listed by Sherborn (1928: 4027) and by Norris & Dance (2002: 372) in *Parthenia*, and credited to “Thorpe” by Tucker (2004: 615). Synonym of *Mangelia costata* (Pennant, 1777). This European species was figured, as *Cythereella coarctata* (Forbes, 1840), another synonym of *Mangelia costata*, by Fretter & Graham (1988: 529–530, fig. 365). Type material not found in NHMUK or Leeds Museum in 2012.

Cancellariidae

Cancellariidae – Forbes & Hanley, 1851: 360, as Cancellariadae.

Architectonicidae

In his 1862 paper, Hanley did not spell out the genus into which he placed his new species, the only clue being the paper's title, “... new Solaria”, which is the vernacular plural of *Solarium*. Norris & Dance (2002) placed the contained species into the Latinized “*Solaria*”, which has to be taken as an incorrect subsequent spelling of *Solarium* Lamarck, 1799, a junior synonym of *Architectonica* Röding, 1798. *Solaria* Champion, 1908, is a genus of beetles.

australis, *Solarium (Philippia) hybridum* var. – Hanley, 1863a: 236. Loc. not stated, but presumably Australia. *Non Solarium australe* Philippi, 1849, which is a junior synonym of *Architectonica perspectiva* (Linnaeus, 1758). A synonym of the Indo-Pacific *Psilaxis radiatus* (Röding, 1798) or *Psilaxis oxytropis* (A. Adams, 1855) (Bieler, 1993: 117–125). Type material not found in NHMUK or Leeds Museum in 2012.

bairdii, *Solarium* – Hanley, 1863a: 231, pl. 254, figs. 48, 49. Loc. unknown; “British Museum” coll. *Nomen dubium* (Bieler, 1993: 336). Type material not found in NHMUK or Leeds Museum in 2012.

canaliferum, *Solarium* – Hanley, 1863a: pl. 254, figs. 98–100 (caption), ex [A.] Adams ms. Philippine Islands; Cuming coll. Although published into the synonymy of *S. cylindraceum* (Dillwyn, 1817), of Hanley, because of its subsequent use by authors, it is an available name. Synonym of the Indo-Pacific *Heliacus (Teretropoma) infundibuliformis* (Gmelin, 1791) (Bieler, 1993: 260–264). Type material not found in NHMUK or Leeds Museum in 2012.

cumingii, *Solarium* – Hanley, 1862: 204; 1863a: 232, 247, pl. 253, figs. 44, 45. Loc. unknown; Cuming coll. Synonym of the Indo-Pacific *Architectonica perspectiva* (Linnaeus, 1758) (Bieler, 1993: 38–45). NHMUK 1981157, holotype (21.8 mm x 34.9 mm).

dunkeri, *Solarium* – Hanley, 1862: 204; 1863a: 233, 247, pl. 252, figs. 29, 30. East Indies; Cuming & Hanley colls. Synonym of the Indo-Pacific *Architectonica perdix* (Hinds, 1844) (Bieler, 1993: 48–52). NHMUK 1981158, lectotype (20.2 mm x 30.6 mm, Cuming collection) (selected by Bieler, 1993: 52). Additional syntypes (which would be paralectotypes) not located in NHMUK or Leeds Museum in 2012.

junior, *Solarium (Torinia) stramineum* var. – Hanley, 1863a: 242. Loc. not stated. Synonym of the Indo-Pacific *Heliacus (Graneliacus) stramineus* (Gmelin, 1791) (Bieler, 1993: 255–259). Type material not found in NHMUK or Leeds Museum in 2012.

latic, *Solarium (Torinia) cyclostomum* var. – Hanley, 1863a: 239. Loc. not stated. Synonym of the Western Atlantic *Heliacus cylindricus* (Gmelin, 1791) (R. Bieler, pers. comm., 18 Sept. 2012). Type material not found in NHMUK or Leeds Museum in 2012.

planulata, *Solarium (Torinia) perspectivunculus* “var.?” – Hanley, 1863a: 238, pl. 254, fig. 63. Loc. not stated. Synonym of the Indo-Pacific *Heliacus (Heliacus) variegatus*

(Gmelin, 1791) (Bieler, 1993: 185–191). NHMUK 1907.10.28.64, figured syntype (6.7 mm x 12.7 mm).

reevei, *Solarium – Hanley, 1862: 204–205; 1863a: 234, 247, pl. 250, figs. 9, 10. Loc. unknown (1862), Sydney, Australia (1863a); Reeve coll. *Adelphotectonica reevei* (Hanley, 1862) (Bieler, 1993: 99–103) from Australia and the western Pacific. *Solarium reevei* Hanley, 1862, is the type species of *Adelphotectonica* Bieler 1987, by original designation. NHMUK 198049, holotype (17.7 mm x 22.7 mm).

regium, *Solarium* – Hanley, 1862: 205. Loc. unknown; Cuming coll. *Incertae sedis* (Bieler, 1993: 97–98). NHMUK 1981159, holotype (14.5 mm x 29.9 mm).

soverbii, *Solarium* – Hanley, 1862: 206; 1863a: 243, 247, pl. 254, figs. 81, 82. Tunetana [Tunisia]; British Museum. Listed by Norris & Dance (2002: 374) as “sowerbii”. Synonym of the eastern Atlantic *Pseudotorinia architae* (O. G. Costa, 1841) (Bieler, 1993: 277–281). Rendered as “sowerbii” by Monterosato (1873:11) and Marshall (1887: 32). NHMUK 1847.9.10.24–25, two syntypes (larger 6.2 mm in diameter, as measured by Bieler).

strigata, *Solarium (Torinia) infundibuliforme* “var.?” – Hanley, 1863a: 243, pl. 254, fig. 94. Synonym of the Indo-Pacific *Heliacus (Teretropoma) infundibuliformis* (Gmelin, 1791) (Bieler, 1993: 260–264). NHMUK 1907.10.28.62, figured syntype (6.3 mm x 10.7 mm).

taylori, *Solarium – Hanley, 1862: 205–206; 1863a: 230, 248, pl. 252, figs. 31, 32. Loc. unknown (1862); Zanzibar (1863a); Hanley coll. The western Pacific *Architectonica taylori* (Hanley, 1862) (Bieler, 1993: 71–73). NHMUK 1907.10.28.98, holotype (21.3 mm x 35.7 mm).

undata, *Solarium (Philippia) hybridum* var. – Hanley, 1863a: 236, pl. 253, figs. 42, 43. Loc. not stated; Taylor coll. Synonym of the Indo-Pacific *Psilaxis radiatus* (Röding, 1798) (Bieler, 1993: 117–125). Type material not found in NHMUK or Leeds Museum in 2012.

vermetiformis, *Solarium (Torinia) cylindraceum* var. – Hanley, 1863a: 243, pl. 254, fig. 100. Philippine Islands; Cuming coll. Synonym of the Indo-Pacific *Heliacus (Teretropoma) infundibuliformis* (Gmelin, 1791) (Bieler, 1993: 260–264). NHMUK 1907.10.28.56, holotype (18.4 mm x 16.6 mm) (pursuant to ICZN Art. 74.6; if any additional syntypes are found, the holotype becomes the lectotype, deemed to have been designated by Bieler, and the additional syntypes become paralectotypes).

Omalogyridae

***rota, Skeneia** – Forbes & Hanley, 1850: 160–161, pl. 73, fig. 10, pl. 88, figs. 1, 2. Donegal, Warren & Barlee. Senior synonym of the type species of *Ammonicerina* O. G. Costa, 1861, *A. pulchella* O. G. Costa, 1861. The northeastern Atlantic *Ammonicerina rota* (Forbes & Hanley, 1850) (Sabelli et al., 1990: 220, as *Ammonicera* [a separate genus]; S. M. Smith & Heppell, 1991: 37); figured as *Ammonicera rota* by Fretter & Graham (1978b: 223–224, fig. 187). Type material not found in NHMUK or Leeds Museum in 2012.

nitidissima, Skeneia – “Forbes & Hanley”, 1850: 158–160, pl. 73, figs. 7, 8; 1853: 269. This was not intended to be a new species, as some authors have interpreted it (Sabelli et al., 1990: 220), but was rather an incorrect use of *Helix nitidissima* J. Adams, 1800. The latter has been interpreted as having been based on a juvenile land snail. The oldest name for the *Skeneia nitidissima* J. Adams, *sensu* Forbes & Hanley and other authors, is *Truncatella atomus* Philippi, 1841. Type species of the genus *Omalogyra* Jeffreys, 1859, by the subsequent designation of Tate (1868), essentially as *Helix nitidissima* J. Adams, *sensu* Forbes & Hanley (1850, 1853) (ICZN Code Art. Art. 70.3)

Pyramidellidae

***eulimoides, Odostomia** – 1844a: xxxvi; Hanley, 1844c: 18; Forbes & Hanley, 1850: 273–276; 1851: pl. 95, figs. 1–3. Guernsey (1844c); Herm near Guernsey (1844a), U.K. Attributed to W. Metcalfe in Sherborn (1926: 2232). *Brachystomia eulimoides* (Hanley, 1844) (Fretter et al., 1986: 601–603, figs. 414, 415; Sabelli et al., 1990: 224, as *Odostomia*; S. M. Smith & Heppell, 1991: 38). Type material not found in NHMUK or Leeds Museum in 2012.

rissoides, Odostomia – 1844a: xxxvi; Hanley, 1844c: 18; Forbes & Hanley, 1850: 284–287; 1851: pl. 96, figs. 4, 5; 1852: 279–280. Guernsey, U.K. Attributed to W. Metcalfe in Sherborn (1930: 5527). *Brachystomia rissoides* (Hanley, 1844) (Fretter et al., 1986: 599–601, figs. 412, 413); as a synonym of *B. scalaris* (Macgillivray, 1843) (Sabelli et al., 1990: 224; S. M. Smith & Heppell, 1991: 38). Aartsen (1987) discussed the valid-

ity of the name *scalaris* Macgillivray, which had been rejected by some authors when it was temporarily a junior homonym. NHMUK 1907.12.30.539–540 includes the specimen figured by Forbes & Hanley (1850), but no locality is associated with this lot. *Odostomia rissoides* Hanley, 1844, is the type species of *Brachystomia* Monterosato, 1884, by the subsequent designation of Crosse (1885), and of *Zastoma* Iredale, 1915, an unnecessary replacement name for *Brachystomia* Monterosato. Type material not found in NHMUK or Leeds Museum in 2012. USNM 132604, from the Jeffreys collection, is labeled as the “figured type,” but this is merely the specimen figured by Jeffreys in his *British conchology* (1869: pl. 73, fig. 4).

***striolata, Odostomia** – Forbes & Hanley, 1850: 267–268; pl. 95, fig. 5, ex Alder ms. Northumberland; Alder. This probably has nothing to do with the *O. striolata* listed by Jeffreys (1848: 339), ex Alder ms, as a *nomen nudum* in the synonymy of *O. turrita* Hanley. *Odostomia striolata* Forbes & Hanley, 1850 (Sabelli et al., 1990: 224; S. M. Smith & Heppell, 1991: 38). Type material not found in NHMUK or Leeds Museum in 2012.

***turrita, Odostomia** – Hanley, 1844a: [v], xxxvi–xxxvii, fig. 10; Hanley, 1844c: 18; Forbes & Hanley, 1850: 267, pl. 95, fig. 9, as a variety of *O. unidentata* (Montagu, 1803). Guernsey, U.K.; W. Metcalfe coll. Attributed to W. Metcalfe in Sherborn (1931: 6697). *Odostomia turrita* Hanley, 1844 (Fretter et al., 1986: 610–612, fig. 422; Sabelli et al., 1990: 224; S. M. Smith & Heppell, 1991: 38). Forbes & Hanley (1852: 279) later noted that their plate 94, fig. 8 (1850), which had also been labeled as *Odostomia unidentata* var. *turrita*, was instead an image of *O. dubia* Jeffreys, 1848; the latter seems now to be regarded as a synonym of *Brachystomia eulimoides* (Hanley, 1844). *Odostomia turrita* Hanley, 1844, is the type species of *Turritodostomia* Sacco, 1892, by original designation. Type material not found in NHMUK or Leeds Museum in 2012.

turrita, Parthenia – Hanley, 1844a: viii, xlv–xlv, fig. 91, ex Metcalfe ms; Jeffreys, 1848: 345; Forbes & Hanley, 1850: 305, the latter two as a synonym of *Odostomia excavata* Philippi, 1836. Guernsey, U.K. The latter is treated as *Folinella excavata* (Philippi, 1836) (Sabelli et al., 1990: 222; S. M. Smith & Heppell, 1991: 38); species figured in Fretter et al. (1986: 571–573, figs. 388, 389, as *Ividella excavata*). Type material not found in NHMUK or Leeds Museum in 2012.

jeffreysii, *Turbonilla* – “Forbes & Hanley, 1855”.

This combination has been cited by some authors, such as Fretter et al. (1986: 640), for *Melania scalaris* Philippi, 1836, *non M. scalaris* Spix & Wagner, 1827. However, this name was not first proposed by Forbes & Hanley. Instead, it first appeared as a *nomen nudum* in Jeffreys (1842: 237) as *Pyramidella jeffreysii*, ex Clark ms, in the synonymy of *Eulima decussata*, also a *nomen nudum*. It next appeared in Jeffreys (1848: 346) as *Turbonilla (Pyrgiscus) jeffreysii*, ex Clark ms, in the synonymy of *Odostomia scalaris* (Philippi, 1836). It then appeared in Forbes & Hanley (1850: 251): “Among collectors this shell has generally been distinguished by the manuscript name *jeffreysii*”. The first person to have treated the name as available before 1961 (ICZN Code, 1999: Art. 11.6.1) appears to be Winckworth (1932: 227), who cited it as of Forbes & Hanley, 1850, along with mention of *scalaris* and citation of the relevant pages from Forbes & Hanley (1850) and Jeffreys (1867). It was not listed by Warén (1980) as a Jeffreys name. However, according to this provision of the Code, it should be dated from Jeffreys (1848), where it first appeared in the synonymy of an available taxon. It is thus treated by recent authors, such as Aartsen (1987), Sabelli et al. (1990: 226) and S. M. Smith & Heppell (1991: 40, 84).

Rissoellidae

****globularis*, *Jeffreysia*** – Forbes & Hanley, 1852: 268–269, pl. 133, fig. 5, ex Jeffreys ms. Skye and the Shetlands; Barlee. *Rissoella (Jeffreysina) globularis* (Forbes & Hanley, 1852) (Fretter & Graham, 1978b: 220–221, fig. 184, as “Jeffreys”; Sabelli et al., 1990: 219; S. M. Smith & Heppell, 1991: 37). *Jeffreysia globularis* Forbes & Hanley, 1852, is the type species of *Jeffreysina* Thiele, 1925, by the subsequent designation of Wenz (1939). Type material not found in NHMUK or Leeds Museum in 2012. USNM 185002, from the Jeffreys collection, is labeled as the “figured type,” but this is merely the specimen figured by Jeffreys in his *British conchology* (1869: pl. 69, fig. 7).

Limacinidae

jeffreysii*, *Spirialis – Forbes & Hanley, 1849: 386, pl. 57, fig. 8. Shores of the English

Channel, Jeffreys. Synonym of *Limacina retroversa* (Fleming, 1823) (Sabelli et al., 1990: 238–239). Type material not found in NHMUK or Leeds Museum in 2012. USNM 169369, from the Jeffreys collection, is labeled as “type,” but it is from Tenby (Wales), which is not on the English Channel, so it is not from the type locality.

macandrewi*, *Spirialis – Forbes & Hanley, 1849: 385–386, pl. 57, figs. 6, 7. Dredged in 60 fms. [110 m], 15 miles south of Mizen Head, south of Ireland, M'Andrew, June 1848. Synonym of *Limacina retroversa* (Fleming, 1823) (Sabelli et al., 1990: 238–239). Type material not found in NHMUK or Leeds Museum in 2012. USNM 169364, from the Jeffreys collection, is labeled as the “figured type,” but this is merely the specimen figured by Jeffreys in his *British conchology* (1869: pl. 98, fig. 5).

Placobranchidae

Elysiidae – Forbes & Hanley, 1851: 613, as Elysiadae. Regarded as a synonym of Placobranchidae Gray, 1840 (Bouchet & Rocroi, 2005: 260).

Lomanotidae

Lomonotus “Forbes & Hanley”, 1851: 585. This is a misspelling of *Lomanotus* Vérany, 1844, as noted by Neave (1939, vol. 2: 987).

Flabellinidae

Flabellina “Forbes & Hanley”, 1851: 592. This was so listed by Neave (1939, vol. 2: 410), but this genus was first made available by Voigt (1834) (ICZN Opinion 781, 1966).

Eubranchidae

Cavolina – Forbes & Hanley, 1851: 297, as “Section III” of *Eolis*. Type species (SD Lemche, 1969, Note within Opinion 883): *Eubranchus tricolor* Forbes, 1838. Junior objective synonym of *Eubranchus* Forbes, 1838 (discussed in ICZN Opinion 883, 1969).

Retusidae

****carpenteri*, *Bulla (Cylichna)*** – Hanley, 1859a: 543–544. Mazatlán [Sinaloa], Mexico; Hanley coll. *Sulcoretusa carpenteri* (Hanley, 1859) (Keen, 1971: 796–797, holotype figured). NHMUK 1907.12.30.249, holotype.

Siphonariidae

***belcheri**, *Siphonaria* – Hanley, 1858c: 151, 153. Probably “Indian Seas”; E. Belcher; Hanley coll. *Siphonaria belcheri* Hanley, 1858, from the Persian Gulf (Hubendick, 1946: 34, 90, pl. 2, figs. 5–8); recently established in the eastern Mediterranean Sea (Albayrak & Caglar, 2006). NHMUK 1900.3.19.28–34, seven syntypes.

blainvillei, *Siphonaria* – Hanley, 1858c: 151, 153. Loc. unknown; Hanley coll. Synonym of *S. funiculata* Reeve, 1856, from Tasmania (Hubendick, 1946: 23, 89, pl. 1, figs. 15–17; Jenkins, 1981: 2, pl. 1a). NHMUK 1907.10.28.90, holotype (13.6 mm x 17.9 mm).

brunnea, *Siphonaria* – Hanley, 1858a: 24; 1858c: 151. Bermuda; Cuming coll. Synonym of *S. alternata* (Say, 1826) from Florida and the Caribbean (Hubendick, 1946: 44–45, 90, pl. 3, figs. 1–6). NHMUK 19818, four syntypes.

***carbo**, *Siphonaria* – Hanley, 1858a: 24; 1858c: 151. Loc. unknown; Cuming coll. *Siphonaria carbo* Hanley, 1858 (Hubendick, 1946: 35, 93, pl. 6, figs. 16, 17). Hubendick (1946) reported this species as coming from Natal (South Africa); Chambers & McQuaid (1994) incorrectly stated that this species “was described from the Caribbean,” so that “we therefore consider that *S. carbo* does not occur on South African shores and adopt *S. nigerrima* Smith, 1903 as the correct name for the South African species.” That conclusion was incorrect since Hanley did *not* have any type locality for this species. NHMUK 19819, holotype (7.6 mm x 21.3 mm).

exulum, *Siphonaria* – Hanley, 1858a: 25; 1858c: 152, as “*exulorum*”. Norfolk Island; Hanley coll. Synonym of *S. diemenensis* Quoy & Gaimard, 1833, which occurs in New Zealand, Australia and Norfolk Island (Hubendick, 1946: 38–39, 90, pl. 2, figs. 14–17). NHMUK 1900.3.19.27, holotype (5.9 mm x 14.1 mm).

***nutallii**, *Siphonaria* – Hanley, 1858c: 152, 153. Hawaii; Frick; Cuming coll. *Siphonaria nutallii* Hanley, 1858, of Hawaii (Hubendick, 1946: 51–52, 91, pl. 4, figs. 1–4, as “*nutalli*”); species not mentioned by Kay (1979: 493) or Severns (2011). NHMUK 20120166, five syntypes; Leeds Museum 1957.173.612, seven possible syntypes (“Sandwich Isles”).

parma, *Siphonaria* – Hanley, 1858a: 24–25; 1858c: 152. West Africa; Cuming coll. Synonym of *S. pectinata* (Linnaeus, 1758), which occurs in both the eastern and western Atlan-

tic (Hubendick, 1946: 31–33, 89, pl. 1, figs. 30–39; Kawauchi & Giribet, 2011). NHMUK 198110, holotype (6.1 mm x 17.6 mm).

redimiculum, *Siphonaria* – “Hanley” – Listed by Norris & Dance (2002: 373) as “var.” and “Proc. zool. Soc. London 25: 25”. However, this species was actually described by Reeve, 1846 (pl. 5, fig. 24). Reeve’s species has been listed as a synonym of *S. lateralis* Gould, 1846 (p. 153), from Patagonia, Falkland Islands, and elsewhere in the sub-Antarctic (Hubendick, 1946: 26–27, 89, pl. 1, figs. 22–25, as *Kerguelenia*), more recently been placed into *Kerguelenella* (Powell, 1979: 293). However, Reeve’s species dates from March 1846, whereas Gould’s species was published in August, so if they are regarded as synonyms, Reeve’s name would take precedence.

rumphii, *Siphonaria* – “Hanley” – Listed by Norris & Dance (2002: 373) as “Proc. zool. Soc. Lond. 26: 153” but not present in Hanley (1858a) and not listed by Hubendick (1946). Possibly a transcription error by Norris & Dance involving *Siphonaria nutallii*, missing from their list, and *Pinna rumphii*.

Lymnaeidae

strigata, *Limnaea ovalis* var. – Hanley & Theobald, 1873: 30, pl. 70, fig. 4. Jounpore. *Non Limnaea pinguis* var. *strigata* G. B. Sowerby II, 1872 (= *Catascopium catascopium* (Say, 1867)). Most likely a synonym of *Radix luteola* (Lamarck, 1822), because *ovalis* is a synonym of *luteola* (Brandt, 1974: 232–233, 376, pl. 16, fig. 98). Starmühlner (1974: 162) listed this as a junior synonym of *Radix (Cerasina) luteola* var. *pinguis* (Dohrn, 1858). Ramakrishna & Dey (2007: 208–209) listed *Lymnaea (Pseudosuccinea) luteola* Lamarck, 1822, but did not mention Hanley & Theobald’s taxon. Type material not found in NHMUK or Leeds Museum in 2012.

sylhetica, *Limnaea ovalis* var. – Hanley & Theobald, 1873: 30, pl. 70, fig. 9. Marshes in Sylhet. Listed in Preston, 1915: 109. Most likely a synonym of *Radix luteola* (Lamarck, 1822), because *ovalis* is a synonym of *luteola* (Brandt, 1974: 232–233, 376, pl. 16, fig. 98). Ramakrishna & Dey (2007: 208–209) listed *Lymnaea (Pseudosuccinea) luteola* Lamarck, 1822, but did not mention Hanley & Theobald’s taxon. Type material not found in NHMUK or Leeds Museum in 2012.

Planorbidae

coromandelianus, *Planorbis* – Hanley, 1859c: 239, as “Fabric. in Dohrn’s MS”, *nomen nudum*.

Legrandia – Hanley in Legrand, 1872: 27, *nomen nudum*; *non Legrandia* Beddome, 1883. This generic name and the species name below [*maddocki*] were mentioned in a letter from Hanley quoted by Legrand, evidently pleased to be honored with a genus of freshwater limpet. Hanley said, “A description with figures will appear in my monograph of Tasmanian freshwater shells now in course of preparation.” No such monograph ever appeared. Legrand (1879: 95) later noted that the species involved, “the finest ... of the genus”, had been named as *Ancylus cumingianus* Bourguignat, 1854 (pp. 91–92, pl. 25, figs. 1–9). The generic name *Legrandia* was made available by Beddome (1883: 91) for a marine fissurellid gastropod, also from Tasmania. Ignoring that the name was nude, Iredale (1943: 230) treated the freshwater limpet genus as being valid. The freshwater limpet has been listed as a synonym of *Pettancylus* Iredale, 1943, or of *Ferrissia* Waker, 1903; B. J. Smith (1992: 266) concluded that *Legrandia* was a junior synonym of *Ancylastrum* Bourguignat, 1854.

maddocki, *Legrandia* – Hanley, in Legrand, 1872: 27, *nomen nudum*. Sometimes listed as a synonym of *Ferrissia* (*Pettancylus*) *petterdi* (Johnston, 1879) or of *Ferrissia* (*Pettancylus*) *tasmanicus* (Tenison-Woods, 1880), two *Ferrissia* taxa described from Tasmania. B. J. Smith (1992: 266) concluded that this species was a junior synonym of *Ancylastrum cumingianus* (Bourguignat, 1854), and stated that Hanley’s type material was “presumed lost”, illogical because a *nomen nudum* cannot have type material.

merguiensis, *Planorbis* – Hanley & Theobald, 1876: 60, pl. 151, figs. 5, 6. Mergui, Birmah, ex Philippi ms. Synonym of the southeast Asian *Indoplanorbis exustus* (Deshayes, 1834) (Brandt, 1974: 234–235, 376, pl. 16, fig. 99). Type material not found in NHMUK or Leeds Museum in 2012.

Onchidiidae

celticum, *Onchidium* – “Forbes & Hanley, 1852”. This was so listed by Fretter (1943) and by Norris & Dance (2002: 370), but this name was actually first made available by Cuvier, in Audouin & Milne-Edwards, 1832.

Now known as *Onchidella celtica* (Cuvier, 1832) (Dayrat, 2009: 4, 10).

Succineidae

collina, *Succinea – Hanley & Theobald, 1873: 30, pl. 68, figs. 8, 9, ex Blanford ms; Blanford, 1881: 200–201. Mahabaleshwar. *Succinea collina* Hanley & Theobald, 1873 (Gude, 1914: 449; Ramakrishna et al., 2010: 209–210). NHMUK 1907.12.30.224–225, two syntypes (from Blanford collection).

Valloniidae

evezardi, *Pupa – Hanley & Theobald, 1874: 41, pl. 101, figs. 5, 6, ex Blanford ms; Blanford, 1881: 199–200, as *Pupa* (*Pupisoma*). Singhur Hill, Dekkan. *Pupisoma evezardi* (Hanley & Theobald, 1874) (Gude, 1914: 37–38, as “Blanford”; Ramakrishna et al., 2010: 124, also as “Blanford”). NHMUK 1923.06.01 may be a specimen subsequently collected by Blanford, from Khandala.

Clausiliidae

bacillum, *Clausilia – Hanley & Theobald, 1870: 12, pl. 24, fig. 1, ex Benson ms. Nanclai, Khasi Hills. *Euphaedusa bacillum* (Hanley & Theobald, 1870) (Mitra et al., 2005: 141–142; Ramakrishna et al., 2010: 141); as *Cylindrophaedusa* (*Montiphaedusa*) *bacillum* (Hanley & Theobald, 1870) (Nordsieck, 2002: 87; 2007: 26). Type material not found in NHMUK or Leeds Museum in 2012.

tuba, *Clausilia – Hanley, 1868b: 343; Hanley & Theobald, 1870: 12, pl. 24, fig. 9. Shan Province, India; Hanley & Theobald colls. *Indonemia tuba* (Hanley, 1868) (Nordsieck, 2007: 37). NHMUK 1888.12.4.1033, syntype; NHMUK 1904.12.30.241, figured syntype (33.4 mm x 5.7 mm).

Subulinidae

Note: the taxa described by Hanley in the “Achatinidae” are now all referred to the Subulinidae.

bottampotana, *Achatina – Hanley & Theobald, 1876: 63, pl. 156, fig. 1, ex Beddome ms. No locality provided. *Glessula bottampotana* (Hanley & Theobald, 1876) (Gude, 1914: 401; Ramakrishna et al., 2010: 154). Both references used the unjustified emendation “*bol-lampattiana*”, because the species was supposed to be from the Bollampatty Hill. However,

because this cannot be ascertained from the original description, this must be considered an unjustified emendation (ICZN Code Art. 33.2). Type material not found in NHMUK or Leeds Museum in 2012.

illustris, *Achatina (Electra) – Hanley & Theobald, 1874: 41, pl. 102, fig. 9, ex Godwin-Austen ms; Godwin-Austen, 1875: 3, pl. 1, fig. 5. Cachar. *Glessula illustris* (Hanley & Theobald, 1874) (Gude, 1914: 421–422; Ramakrishna et al., 2010: 162, both with “Godwin-Austen” as author). NHMUK 1985158, four possible syntypes from Godwin-Austen’s collection (Hengdan Peak, North Cachar Hills, India); since Hanley & Theobald published Godwin-Austen’s name, it is possible that they relied upon Godwin-Austen’s specimens.

isis, *Achatina (Glessula) – Hanley, 1876: 606; Hanley & Theobald, 1876: 62, pl. 155, fig. 5. India meridionalem; Hanley coll. *Glessula isis* (Hanley, 1876) (Gude, 1914: 393–394; Ramakrishna et al., 2010: 163). Type material not found in NHMUK or Leeds Museum in 2012.

sattaraensis, *Achatina (Electra) – Hanley & Theobald, 1873: 33, pl. 78, fig. 4, ex H. Adams ms. Sattara, Bombay, India. Not an Adams species (and thus not listed in Trew, 1992), but rather a new name for *Glessula fusca* H. Adams, 1868, *non Achatina fusca* Pfeiffer, 1852. *Glessula sattaraensis* (Hanley & Theobald, 1873) (Gude, 1914: 432; Ramakrishna et al., 2010: 173, the latter as the unjustified emendation “sattarensis”). Theobald (1876: 52a) said: “This shell, it may be presumed, came from Western India rather than either Saharunpur or Ceylon,” as incorrectly cited by Hanley & Theobald. NHMUK 1986032 is labeled the “holotype”, but this was Hanley & Theobald’s specimen, so it cannot be the type of this renamed homonym (ICZN Code Art. 72.7). NHMUK 1878.1.28.632 is the true holotype of H. Adams (and Hanley & Theobald), but unfortunately it was “crushed in the box” according to the label and no longer extant as of 2012.

senator, *Achatina (Glessula) – Hanley, 1876: 606; Hanley & Theobald, 1876: 62, pl. 155, fig. 4. Cottyam Hills, India meridionali; M’Andrew & Beddome colls. *Glessula senator* (Hanley, 1876) (Gude, 1914: 393; Ramakrishna et al., 2010: 174). Type material not found in NHMUK or Leeds Museum in 2012.

theobaldi, *Achatina (Electra) – Hanley & Theobald, 1870: 9, pl. 17, fig. 5. “Near the Salwen.” *Bacillum theobaldi* (Hanley & Theobald, 1870) (Gude, 1914: 344–345; Ramakrishna

et al., 2010: 150, both incorrectly with only Hanley as author). Type material not found in NHMUK or Leeds Museum in 2012.

Bacillum – Theobald in Hanley & Theobald, 1870: 17. Proposed as a subgenus of *Achatina*. “The sub-genus *Bacillum* is proposed by Mr. Theobald for this [*Achatina obtusa* Blanford, 1869 (Burma)], the preceding [*A. cassiaca* Reeve, ex Benson ms. (Khasia Hills)], and other allied forms.” Type species (subsequent designation of Pilsbry, 1906: 1): *Achatina cassiaca* Reeve, 1849. Used as a valid genus without discussion (Ramakrishna et al., 2010: 148). Not a Hanley taxon, because it was expressly credited to Theobald in the Hanley & Theobald work.

lyrata, Achatina (Electra) – Blanford, 1870: 20–21 [March]; Hanley & Theobald, 1870: pl. 18, fig. 9, ex Blanford ms. This species has to be credited to Blanford, who published it at a known date in 1870, whereas its appearance in Hanley & Theobald (1870) has to be dated at the end of the year. *Glessula lyrata* (Blanford, 1870) (Gude, 1914: 441–442); not mentioned by Ramakrishna et al. (2010: 165).

Corillidae

beddomeae, *Helix (Plectopylis) – Hanley & Theobald, 1876: 60, pl. 150, figs. 1–2. “Ceylon or Southern India.” [Named after the wife of Colonel Beddome]. *Corilla beddomeae* (Hanley & Theobald, 1876) (Satyamurti, 1960: 92–93; Naggs & Raheem, 2000: viii, 113, fig. 139). Type material not found in NHMUK or Leeds Museum in 2012.

Parmacellidae

tennentii, *Parmacella – Hanley, 1859c: 238, ex Templeton ms. Kalany Ganga, near Ruanwellé, Ceylon [Sri Lanka]. Type material not found in NHMUK or Leeds Museum in 2012.

Ariophantidae

ingrami, *Helix – Hanley & Theobald, 1872: 27, pl. 60, figs. 9–10, ex Blanford ms; Blanford, 1881: 193–195, as “*Sesara? ingrami*”. Aracan Hills (Benson coll.). *Sesara ingrami* (Hanley & Theobald, 1872) (Blanford & Godwin-Austen, 1908: 248). Type material not found in NHMUK or Leeds Museum in 2012.

phidias, *Helix – Hanley & Theobald, 1876: 59, pl. 149, fig. 4, ex Thorp ms. Upper Ouvah, Ceylon; F. Layard. *Euplecta phidias* (Hanley & Theobald, 1876) (Blanford & Godwin-Austen, 1908: 71; Naggs & Raheem, 2000: v, 49, fig. 63). Type material not found in NHMUK or Leeds Museum in 2012.

reevei, *Helix juliana* – Hanley & Theobald, 1872: 24, pl. 52, fig. 7. Ceylon. Possible synonym of *Ariophanta (Cryptozona) juliana* (Gray, 1834). Type material not found in NHMUK or Leeds Museum in 2012.

solida, *Helix semidecussata* var. – Hanley & Theobald, 1872: 27, pl. 58, fig. 2. Ceylon. Synonym of *Euplecta semidecussata* (L. Pfeiffer, 1853) (Blanford & Godwin-Austen, 1908: 57–58). Type material not found in NHMUK or Leeds Museum in 2012.

vidua, *Helix – Hanley & Theobald, 1875: 52, pl. 130, figs. 2, 3, ex Blanford ms; Blanford, 1881: 190–191, 222, pl. 2, fig. 5. Khasi Hills. Type species of the genus *Khasiella* Godwin-Austen, 1899 (pp. 129–132), by the subsequent designation of Blanford & Godwin-Austen (1908: 157). *Khasiella vidua* (Hanley & Theobald, 1875) (Blanford & Godwin-Austen, 1908: 158–159; Mitra et al., 2005: 272–273; Ramakrishna et al., 2010: 299–300). NHMUK 1906.2.2.307, possible syntype.

Bradybaenidae

arakanensis, *Helix tapeina var. – Hanley & Theobald, 1870: 8, pl. 15, fig. 10, ex Theobald ms; Hanley & Theobald, 1876: vii, as a full species of *Helix*. Assam. *Plectotropis arakanensis* (Hanley & Theobald, 1870) (Gude, 1914: 503, who credited the species solely to Theobald). Type material not found in NHMUK or Leeds Museum in 2012.

concolor, *Helix zoroaster* var. – Hanley & Theobald, 1874: 36, pl. 86, figs. 2, 3. Near the Irawadi, between Prome and Ava. Synonym of *Bradybaena zoroaster* (Theobald, 1859) (Gude, 1914: 202–203, as *Eulota*). Now placed in *Bradybaena* (R. Bank, pers. comm., 29 Jan. 2012). Type material not found in NHMUK or Leeds Museum in 2012.

Camaenidae

andamanicus, *Bulimus – Hanley & Theobald, 1876: 59, pl. 148, fig. 10, ex Thorp ms. Andaman Islands. *Amphidromus andamanicus* (Hanley & Theobald, 1876) (Gude, 1914: 184–185; Subba Rao & Mitra, 1991: 69, pl. 5, as a subspecies of *A. furcillatus* in text only; Mitra et al., 2005: 299–300; Ramakrishna et al., 2010:

322 (as a full species). Type material not found in NHMUK or Leeds Museum in 2012.

anserina, *Helix* – “Hanley & Theobald”, 1874: 46, pl. 112, figs. 7, 10. Unjustified emendation of *Helix ansorinus* Theobald, 1866; also used by Theobald (1876: 26) and Gude (1914: 175–176). Now *Chloritis ansorina* (Theobald, 1866).

Unknown Pulmonata

nietneri, *Helix* – Hanley, 1859c: 239, ex Dohrn ms, *nomen nudum*. Ceylon [Sri Lanka].

CEPHALOPODA

umbilicatus, *Nautilus* – “Hanley”, 1840 & 1842a: viii, 145, text fig. Listed by Tomlin (1945: 91) and by Norris & Dance (2002: 374) as a Hanley species, this was more likely simply a misspelling of *N. umbilicatus* Linnaeus, 1758, so there would be no “Hanley” type material.

ACKNOWLEDGEMENTS

We thank the following colleagues for their helpful comments on various taxa: Jacobus J. Aartsen (Pyramidellidae), Ruud A. Bank (non-marine taxa), Rüdiger Bieler (Architectonicidae), Arthur Bogan (Unionoidea), Philippe Bouchet (Pyramidellidae), Mathias Glaubrecht (Pachychilidae and Thiaridae), Markus Huber (Bivalvia), Charles Krijnen (Neritidae), Patrick I. LaFollette (Pyramidellidae), Richard E. Petit, David Reid (Littorinidae), Emilio Rolán (Pyramidellidae), and Anders Warén (Rissooidea). Philippe Bouchet and J.-P. Rocroi also provided helpful information on several genus-group taxa. At the NHMUK in June 2012, Kathie Way and Fred Naggs provided helpful discussion on various aspects of the Hanley collection; Jon Ablett and Andreia Salvador recatalogued the overlooked type material and provided additional information on certain lots. At the Leeds Museum in July 2012, Rebecca Machin assisted with the examination of the Hanley collection. V. Héros (MNHN) searched for a potential Hanley type.

Rüdiger Bieler, Markus Huber, and Richard E. Petit provided helpful reviews of the manuscript and discussion on several key points. Adrian Norris (Leeds) provided further information on Hanley's life.

LITERATURE CITED

Works by Hanley and Thorpe

- HANLEY, SYLVANUS CHARLES THORPE, 1840, *The young conchologist's book of species. Univalves. Containing the descriptions of six hundred species, and illustrated by many figures.* James Fraser, London, viii + 146 pp., colored frontispiece [aside from frontispiece, illustrations mostly crude line drawings; pp. v–vii, Advertisement; pp. vii–viii, List of Illustrations] [2nd ed.: 1842a] [This book was announced as having been published on Monday, August 3, 1840, according to an announcement in the *Caledonian Mercury* (Edinburgh), Aug. 3, 1840, p. 1.]
- 1841, *Exotic conchology; or figures and descriptions of rare, beautiful, or undescribed shells, drawn on stone from the most select specimens; the descriptions systematically arranged on the principles of the natural system.* By William Swainson, ... Second edition, ed. by Sylvanus Hanley. Henry W. Bohn, London, 39 pp., 48 colored pls. [The first edition of 1821–1822 was reissued in 1834–1835, so this was in essence a third edition – Sherborn & Reynell, 1915; McMillan, 1963].
- 1842a, *The conchologist's book of species: containing descriptions of six hundred species of univalves. With numerous illustrations. Second edition, enlarged, with a glossary of terms, index to the genera and their localities, etc.* Henry Washbourne, London, xii + 154 pp., 1 colored pl. [post-March (Advertisement date)] [changes from 1st ed., 1840: pp. v–vi, Advertisement rewritten; pp. [vii]–xii, Glossary added; pp. 147–154, Index added].
- 1842b, 1843b, 1843f [1842–1843], [An illustrated, enlarged, and English edition of Lamarck's species of shells, comprising the whole of the recent additions in Deshayes' last French edition, with numerous species not noticed by that naturalist: accompanied by accurate delineations of almost all the shells described, and forming the third edition of the *Index Testaceologicus*, 1843]. W. Wood, London, 224 + 8 + [3] + 8 pp., 3 pls. [pp. 1–32, pls. 1, 2 – late 1842 (1842b); pp. 33–144, pl. 3 – early 1843 (1843b); pp. 145–224, 8 pp. (Systematic List), [3] pp. (List of Illustrations = expls. to pls. 1–3), 8 pp. (expls. to pls. 9–13), late 1843 (1843f)] [Title pasted on the cover of some copies, probably from a paper cover. The 8-page expl. for pls. 9–13 are in every copy examined; while these plates had not yet been issued, they were also referred to in the Systematic Index in this volume, so it is assumed that these 8 pp. were also issued in late 1843.]. Reissued, with new material, but without pls. 1–3 and their expls., as 1842–1846 (under 1843g).
- 1843a, Descriptions of four new species of bivalve shells. *Proceedings of the Zoological Society of London*, for 1842[10](116): 122–123 (Jan.) [communicated by L. Reeve]. Reprinted: *Annals and Magazine of Natural History*, (1)11(Suppl. 73): 537 (1 June 1843).
- 1843b, See 1841–1843 (under 1842b).
- 1843c, [Five new species of shells belonging to the genus *Donax*, a group of acephalous mollusks]. *Proceedings of the Zoological Society of London*, for 1843[11](120): 5–6 (July) [communicated by L. Reeve]. Reprinted: *Annals and Magazine of Natural History*, (1)12(79): 442–444 (1 Dec. 1843).
- 1843d, [A new species of *Mya* of Linnaeus and Lamarck]. *Proceedings of the Zoological Society of London*, for 1843[11](120): 6–7 (July) [communicated by L. Reeve]. Reprinted: *Annals and Magazine of Natural History*, (1)12(79): 444 (1 Dec. 1843).
- 1843e, Descriptions of five new species of bivalve shells, from the collection of W. Metcalfe, Esq. *Proceedings of the Zoological Society of London*, for 1843[11](126): 101–102 (Dec.) [communicated by L. Reeve].
- 1843f, See 1842–1843 (under 1842b).
- 1843g, 1844g, 1846c [1842–1846], *An illustrated and descriptive catalogue of Recent shells, by Sylvanus Hanley, B.A., F.L.S. The plates forming a third edition of the Index Testaceologicus, by William Wood.* W. Wood, London, 272 + 18 pp. (expls. for pls. 9–19), pls. 9–19 [see 1842–1843 (under 1842b) for reissued material; pp. 225–272, pls. 9–13, late 1843 (1843g); pls. 14–16, 1844 (1844g); pp. 9–18 (expls. to pls. 9–19), pls. 17–19, 1846 (1846c); pp. 9–14 of the pl. expl. could have appeared in 1844, which would change the dates of some species, but there is no evidence that it was.]. Reissued once again, with new material, as 1842–1856; see under 1856a.
- 1844a, Systematic Index, pp. xvii–lx, in: CHARLES THORPE, *British marine conchology; being a descriptive catalogue, arranged according to the Lamarckian system, of the salt water shells of Great Britain, assisted by several distinguished conchologists, and illustrated with numerous delineations of the rarer and unfigured species by G. B. Sowerby and W. Wood.* Edward Lumley, London, xlx + 267 pp., [8] pls., incl. colored frontispiece (“April,” *fide* Sherborn, on what basis unknown). [The Systematic Index, pp. xvii–lx, which contains new species, was “contributed by Sylvanus Hanley” (p. iv). Appendix, pp. 263–267, describing new species by William Bean (1787–1866), the taxa of which are not treated herein. Bean's taxa have not yet been the subject of separate evaluation.] Entire work reprinted in London by E. Lumley, 1884.
- 1844b, Description of new species of Mytilacea, &c. *Proceedings of the Zoological Society of London*, for 1844[12](132): 14–17 (July). Reprinted: *Annals and Magazine of Natural History*, (1)14(92): 367–370 (1 Nov. 1844).
- 1844c, A description of new species of Recent shells, chiefly from the collection of W. Metcalfe,

- Esq. *Proceedings of the Zoological Society of London*, for 1844[12](132): 17–18 (July). Reprinted: *Annals and Magazine of Natural History*, (1)14(92): 370–372 (1 Nov. 1844).
- 1844d, 1844f, 1845a [1844–1845], [Descriptions of new species of the genus *Tellina*, chiefly collected by H. Cuming, Esq. in the Philippine Islands and Central America]. *Proceedings of the Zoological Society of London*, for 1844[12](134): 59–64 (Sept. 1844); (134): 68–72 (Sept. 1844) (1844d); (138): 140–144 (Dec. 1844); (139): 146–149 (Dec. 1844) (1844f); (141): 164–166 (Feb. 1845) (1845a). Reprinted: *Annals and Magazine of Natural History*, (1)14(suppl. 94): 504–509 (1 Jan. 1845); 15(95): 46–50 (1 Jan. 1845); 15(99): 363–371 (1 May 1845); 15(100): 435–437 (1 June 1845).
- 1844e, Descriptions of a number of new species of shells belonging to the genus *Cytherea*. *Proceedings of the Zoological Society of London*, for 1844[12](137): 109–110 (Dec.). Reprinted: *Annals and Magazine of Natural History*, (1)15(96): 133–135 (1 Feb. 1845).
- 1844f, See 1844–1845 (under 1844d).
- 1844g, See 1842–1846 (under 1843g).
- 1845a, See 1844–1845 (under 1844d).
- 1845b, [Descriptions of new species of *Cyrena*, *Venus* and *Amphidesma*]. *Proceedings of the Zoological Society of London*, for 1844[12](140): 159–162 (Feb.). Reprinted: *Annals and Magazine of Natural History*, (1)15(100): 431–435 (1 June 1845).
- 1845c, Description of three new species of shells belonging to the genus *Artemis*. *Proceedings of the Zoological Society of London*, for 1845[13](143): 11–12 (April). Reprinted: *Annals and Magazine of Natural History*, (1)16(102): 56–57 (1 July 1845).
- 1845d, Descriptions of six new species of *Donax*, in the collection of Hugh Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1845[13](144): 14–16 (April). Reprinted: *Annals and Magazine of Natural History*, (1)16(102): 58–60 (1 July 1845).
- 1845e, [Descriptions of two new species of *Donax*]. *Proceedings of the Zoological Society of London*, for 1845[13](144): 17 (April). Reprinted: *Annals and Magazine of Natural History*, (1)16(102): 61 (1 July 1845).
- 1845f, Descriptions of three new species of bivalve shells, of the genera *Cytherea* and *Venus*. *Proceedings of the Zoological Society of London*, for 1845[13](145): 21–22 (Aug.). Reprinted: *Annals and Magazine of Natural History*, (1)16(106): 356–357 (1 Nov. 1845).
- 1846a, Monograph of the genus *Tellina*. In: G. B. SOWERBY II, ed., *Thesaurus conchyliorum; or, monographs of the genera of shells*, 1(6): 221–336, pls. 56–66 (3 Jan.) [date from a reprint in the Library of the Smithsonian Institution, presumably a separate distributed by Hanley].
- 1846b, A description of new species of ostreae, in the collection of H. Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1845[13](152): 105–107 (Feb.).
- 1846c, See 1842–1846 (under 1843g).
- 1852, Corfiote shells. *Annals and Magazine of Natural History* (ser. 2) 10(55): 74–75 (1 July).
- 1854, 1858f [1854–1858], *The conchological miscellany ... illustrative of Amphidesma, Pandora, Ostrea, Melo, the Melaniadae, Ampullaria and Cyclostoma*. Williams & Norgate, London & Edinburgh, [11] pp. of legends, 40 pls. [with figures numbered within each genus] [*Melania* pls. 1–5, [2] pp. of expls.; *Ostrea* pls. 1–3, [1] p. of expls.; *Ampullaria* pls. 1–4, [1] p. of expls. – 24 Nov. 1854; *Pandora* pl. 1, [1] p. of expls. shared with *Melo* pls. 1–14, same p. of expls. as that for *Melo*; *Amphidesma* 3 pls., [1] p. of expls.; *Melaniadae* pls. 6–8, [1] p. of expls.; *Cyclostoma* 7 pls., [4] pp. of expls. – 1858] [Hanley stated on the last page of the explanations to the *Cyclostoma* plates that some parts appeared on Oct. 1, 1857, but since it cannot be ascertained which these might be, those not known to be 1854 must date from 1858; concerning: Petit, 2009: 56–58].
- 1855, *Ipsa Linnaei conchyliæ. The shells of Linnaeus, determined from his manuscripts and collection. ... Also, an exact reprint of the Vermes Testacea of 'Systema Naturae' and 'Mantissa'*. Williams & Norgate, London, 557 pp., 5 pls.
- 1856a [1842–1856], *An illustrated and descriptive catalogue of Recent bivalve shells*. Williams & Norgate, London, xviii + 392 + 24 pp., pls. 9–24 [see 1842–1843 (under 1842b) & 1842–1846 (under 1843g) for reissued material; pp. i–xviii, 273–392; pp. 19–24 (expl. for pls. 20–24), pls. 20–24, 1856].
- 1856b, *Index testaceologicus, an illustrated catalogue of British and foreign shells, containing about 2800 figures accurately coloured after nature, by W. Wood, F. R.S., F.L.S. A new and entirely revised edition, with ancient and modern appellations, synonyms, localities, etc. etc.* Willis & Sotheran, London, xx + 234, 38 + 8 supplementary pls.
- 1857, Descriptions of four new species of Kellidae in the collection of Hugh Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1856[24](322): 340–341 (8 May).
- 1858a, Description of a new *Cyrena* from Ceylon, and of new Siphonariae. *Proceedings of the Zoological Society of London*, for 1858[26](348): 23–25 (9 March).
- 1858b, Description of two new species of *Pinna*. *Proceedings of the Zoological Society of London*, for 1858[26](355): 136 (12 July).
- 1858c, On *Siphonaria*. *Proceedings of the Zoological Society of London*, for 1858[26](356): 151–153 (12 July).
- 1858d, Description of new pinnae. *Proceedings of the Zoological Society of London*, for 1858[26](361): 225–229 (9 Nov.); (362): 254–255 (9 Nov.).
- 1858e, Description of a new *Oniscia*. *Proceedings of the Zoological Society of London*, for 1858[26](362): 255–256, pl. 42 [two figs. thereon] (9 Nov.).

- 1858f, See 1854–1858.
- 1859a, Description of a new *Cyrena* and *Bulla*. *Proceedings of the Zoological Society of London*, for 1858[26](380): 543–544 (May).
- 1859b, On the Linnean manuscript of the 'Museum Ulricae'. *Journal of the Linnean Society of London. Zoology*, 4(13): 43–48 (1 July); (14): 49–90 (19 Sept.).
- 1859c, List of Ceylon shells. Pp. 235–243, in: JAMES EMERSON TENNENT, *Ceylon[.] An account of the island[.] Physical, historical, and topographical with notices of its natural history, antiques and productions*, Vol. 1. Longman, Green, Longman & Roberts, London, xxxv–[xxxvi] + 619 pp., frontispiece, 3 pls. (post–13 July 1859 – Introduction date) [This book went through two more editions in 1859 and two in 1860, with the same list on the same pages; later, this same list appeared on pp. 388–395, in: Tennent's, 1861, *Sketches of the natural history of Ceylon ...* Longman, Green, Longman & Roberts, London, xxiii–[xiv–xv] + 500 pp., frontispiece, 10 pls. (post–1 Nov.)].
- 1860a, Descriptions of new univalve shells from the collections of H. Cuming and Sylvanus Hanley. *Proceedings of the Zoological Society of London*, for 1859(3): 429–431 (between Oct. 1859 & Feb. 1860; thus, must date from Feb. 1860).
- 1860b, Systematic list of the species of *Dolium* restricted. *Proceedings of the Zoological Society of London*, for 1859(3): 487–493 (between Oct. 1859 & Feb. 1860; thus, must date from Feb. 1860).
- 1860c, Monograph of the family Nuculidae, forming the Lamarckian genus *Nucula*. In: G. B. SOWERBY II, ed., *Thesaurus conchyliorum; or, monographs of the genera of shells*, 3(20): 105–168 [repr.: 1–64] + [8] pp., pls. 226–230 [= 1–5].
- 1861a, On some new species of Nuculaceae in the collection of Hugh Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1860(3): 370–371 (between Aug. 1860 & March 1861; thus, must date from March 1861).
- 1861b, Description of new Nuculidae. *Proceedings of the Zoological Society of London*, for 1860(3): 440–442 (between Aug. 1860 & March 1861; thus, must date from March 1861).
- 1861c, Description of a new *Leda*. *Proceedings of the Zoological Society of London*, for 1861(2): 242 (Sept.).
- 1861d, Description of a new species of *Pandora*. *Proceedings of the Zoological Society of London*, for 1861(2): 272 (Sept.).
- 1862, Description of new solaria, chiefly in the collection of H. Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1862(2): 204–206 (Sept.).
- 1863a, Monograph of the Recent species of the genus *Solarium* of Lamarck. In: G. B. SOWERBY II, ed., *Thesaurus conchyliorum; or, monographs of the genera of shells*, 3(22): 227–248, pls. 250–254.
- 1863b, *Photographic conchology, a second, or photographic series, of the Conchological Miscellany, of Sylvanus Hanley, The photographs, forming a sequence to the Index Testaceologicus (Hanley's edition), illustrative of species either not delineated in the more common works, or distinguished for rarity, by Samuel Musgrave, photoprinter*. Willis & Sotheran, London, [3] pp., 7 pls. [I: pls. 1, 2, 1 p. expl.; II: pls. 3–5, 1 p. expl.; III: pls. 6, 7, 1 p. expl.].
- 1868a [January], *Caliphs and sultans, being tales omitted in the usual editions of the Arabian Nights entertainments; re-written and re-arranged by Sylvanus Hanley, ...* Reeve, London: viii + 363 pp. ["2nd ed.", 1870, seemingly identical] [This work was announced in two London newspapers, *The Illustrated London News* (Saturday, Jan. 25, 1868, p. 90), and *The Examiner* (Jan. 25, 1868, p. 56), as having been published "this week".]
- 1868b, Description of rare Indian *Clausilia*. *Annals and Magazine of Natural History*, (4)1(5): 343 (1 May).
- 1871, Description of a new species of *Monocondylaea*. *Proceedings of the Zoological Society of London*, for 1871(2): 587–588 (Aug.).
- 1876, Descriptions of new land and freshwater shells from India. *Proceedings of the Zoological Society of London*, for 1875(4): 605–607 (April) [species list reported in *Quarterly Journal of Conchology* 1(9): 152, Aug. 1876].
- 1879, Description of two new shells. *Journal of the Linnean Society of London. Zoology*, 14(78): 580–581 (23 April).
- 1882a, Description of a new species of a new species of *Donax* in the collection of the author. *Journal of the Linnean Society of London. Zoology*, 16(95): 539–541, pl. 12 (26 Sept.) [new species of *Leptomya* described in Hanley, 1882b date from the plate and its explanation in this paper, which also figured *Teredo utriculus* discussed in 1885a].
- 1882b, On the genus *Leptomya* (A. Adams). *Proceedings of the Zoological Society of London*, for 1882(3): 576–577 (Oct.) [figured on plate in 1882a, making the new names available therein].
- 1885a, On the *Teredo utriculus* of Gmelin, with remarks upon other ship-worms. *Annals and Magazine of Natural History*, (5)16(91): 25–31 (1 July) [figured on plate in 1882a].
- 1885b, On a new variety of *Chama*, allied to the *C. arcinella* of Linnaeus. *Journal of the Linnean Society of London. Zoology*, 18(107): 292 (31 March).
- FORBES, EDWARD & SYLVANUS CHARLES THORPE HANLEY, 1848–1853, *A history of British Mollusca, and their shells*. London, van Voorst, 4 vols., 2,064 pp., 197 pls. Collation modified from Woodward (1901), Reynell (1918a), and Fisher & Tomlin (1935):

Vol.	Part	Pages	Plates	Date
1	1	1–40	A, B, 1, 2	Jan. 1, 1848
	2	41–80	C, D, 3, 4	Feb. 1, 1848
	3	81–120	E, 5–7	March 1, 1848
	4	121–160	F, 8–10	April 1, 1848
	5	161–200	G, 11–13	May 1, 1848
	6	201–240	H, 14–16	June 1, 1848
	7	241–280	I, 17–19	July 1, 1848
	8	281–320	K, 20–22	Aug. 1, 1848
	9	321–360	L, 23–25	Sept. 1, 1848
	10	361–400	N, 26–28	Oct. 2, 1848
	11	401–440	O, 29–31	Nov. 1, 1848
	12	441–478	M, 32–34	Dec. 1, 1848
	51	479–486 title page, vii–lxxx		May 1, 1853
2	51	title page, v–viii		May 1, 1853
	13	1–40	P, 35–37	Jan. 1, 1849
	14	41–80	R, 38–40	Feb. 1, 1849
	15	81–120	Q, 41, 43, 44	March 1, 1849
	16	121–160	S, 45–47	April 2, 1849
	17	161–200	U, 42, 48, 49	May 1, 1849
	18	201–240	50–53	June 1, 1849
	19	241–280	AA, 54–56	July 2, 1849
	20	281–320*	BB, 58, 59, 61	Aug. 1, 1849
	21	321–360	NN, 57, 62, 63	Sept. 1, 1849
	22	361–400	DD, 64–66	Oct. 1, 1849
	23	401–440	FF, 60, 67, 68	Nov. 1, 1849
	24	441–480	II, 69–71	Dec. 1, 1849
	25	481–520	CC, 72, 73, 77	Jan. 1, 1850
	26	521–557	T, 74, 78, 79	Feb. 1, 1850
3	51	title page, v–x		May 1, 1853
	27	1–40	EE, 83–85	March 1, 1850
	28	41–80	GG, HH, 80, 86	April 1, 1850
	29	81–120	JJ, 75, 76, 81	May 1, 1850
	30	121–160	LL, 82, 87, 115	June 1, 1850
	31	161–200	KK, 88, 116, 117	July 1, 1850
	32	201–240	OO, 118–120	Aug. 1, 1850
	33	241–280	PP, 89, 92, 121	Nov. 1, 1850
	34	281–320	“SS” [= XX], 90, 91, 93	Dec. 2, 1850
	35	321–360	RR, 94–96	Jan. 1, 1851
	36	361–400	SS, 97, 99, 100	Feb. 1, 1851
	37	401–440	TT, 101–103	March 1, 1851
	38	441–480	UU, 104–106	April 1, 1851
	39	481–520	VV, 107–109	May 1, 1851
	40	521–560	110–113	June 2, 1851
	41–42	561–616	YY, ZZ, 98, 114, 114A–D	Sept. 1, 1851
4	51	title page, iii–vi		May 1, 1853
	43	1–40	DDD, 114E, 114F, 123	Jan 1, 1852
	44	41–80	“FFF” [= GGG], 124–126	Feb. 2, 1852
	45	81–120	EEE, 129–131	March 1, 1852
	46	121–160	FFF*, 122, 127, 128	April 1, 1852
	47	161–200	HHH, KKK, LLL, MMM	July 1, 1852
	48	201–240	BBB, OOO, PPP, QQQ	Sept. 1, 1852
	49	241–280	AAA, CCC, 132, 133	Dec. 1, 1852
	50	281–302	W, MM, III, JJJ, NNN, RRR, SSS	May 1, 1853

Notes: Part numbers were on part covers and are not evident in bound volumes. Fisher & Tomlin (1935) listed Parts 50 and 51 as being issued together. It can be assumed that Part 51 contained the end pages for Vol. 1 (Explanation of the Plates of Animals, pp. 479–486) as well as the Title page, Dedication, Preface (vii–ix), General Index (xxxvii–lxxv), and Contents (lxxvii–lxxx). It also contained the title contents pages for Volumes 2–4 (Woodward, 1901). The verso of page 301 in Vol. 4 is unnumbered but is imprinted with instructions to binders and is therefore considered an included page. The numbered plates are of empty shells, while the lettered plates show live animals.

In Part 34, Plate XX was incorrectly numbered as SS in a few copies of the work – the misnumbered plate depicts *Pleurobranchus*; the true Plate SS depicts *Fusus*. In Part 44, Plate GGG was misnumbered as FFF. This plate depicts *Helix* and other snails. To avoid confusion, what should have been FFF was issued as FFF* (depicting *Arion* and other slugs). The plates are dated to year. There are no plates numbered J, V, X, Z, QQ, or WW. Sometimes listed as having 210 plates, without noting the omissions, and miscataloged in many libraries as having 197 plates, with plates 114A–F being overlooked. [Note that pages 309–320 of volume 3(20) were reprinted in the *Edinburgh New Philosophical Journal* 47(94): 239–248, Oct. 1849, erroneously credited to “Forbes & Stanley [sic]”; this excerpt was listed by Norris & Dance (2002: 376) as if it were a separate article by Hanley & Forbes.].

It should be noted that Damon (1857), a shell dealer, published an 11-page checklist of the names in Forbes & Hanley, and this is catalogued in at least one library as if it were by Forbes & Hanley, the title page having been lost.

HANLEY, SYLVANUS CHARLES THORPE & WILLIAM THEOBALD, 1870–1876, *Conchologia Indica: illustrations of the land and freshwater shells of British India*. London, Reeve, xviii + 65 pp., 160 pls. Issued in parts as follows (dating: Prashad, 1927):

Part	Pages	Plates	Date
1	1–10	1–20	1870
2	11–18	21–40	1870
3	19–28	41–60	1872
4	29–34	61–80	1873
5	35–40	81–100	1874
6	41–48	101–120	1874
7	49–56	121–140	1875
8	57–65, i–xviii	141–160	1876

THORPE, CHARLES ERNEST, 1844, *British marine conchology; being a descriptive catalogue, arranged according to the Lamarckian system, of the salt water shells of Great Britain, by Charles Thorpe, assisted by several distinguished conchologists, and illustrated with numerous delineations of the rarer and unfigured species by G. B. Sowerby and W. Wood*. Edward Lumley, London, xlx + 267 pp., [8] pls., incl. colored frontispiece (“April,” *fide* Sherborn, on what basis unknown). [Systematic Index, pp. xvii–lx, with new species, “contributed by Sylvanus Hanley” (p. iv). Appendix, pp. 263–267, describing new species by William Bean.]. Entire work reprinted in London by E. Lumley, 1884.

Other Works Cited

AARTSEN, J. J. VAN, 1987, Nomenclatural notes, 4. *Melania scalaris* Philippi, 1836, and *Odostomia scalaris* Macgillivray, 1843. *Basteria*, 51(4–6): 149–150.

ABBOTT, R. T., ed., 1968, *Exotic conchology. Delaware Museum of Natural History, Reproduction Series No. 1*. Van Nostrand Company, Princeton, xxiv + 48 pp., 48 pls.

ABBOTT, R. T. & S. P. DANCE, 1982, *Compendium of seashells. A color guide to more than 4,200 of the world's marine shells*. Dutton, New York, x + 413 pp.

ADAMS, H. & A. ADAMS, 1853–1858, *The genera of Recent Mollusca; arranged according to their organization*. John van Voorst, London, 2 vols. [1, 1–256, pls. 1–32 (1853); 1, 257–484, 2, 1–92, pls. 33–72 (1854); 2, 93–284, pls. 73–96 (1855); 2, 285–412, pls. 97–112 (1856); 2, 413–540, pls. 113–128 (1857); 2, 541–660, pls. 129–138 (1858).]

ADANSON, M., 1857, *Histoire naturelle du Sénégal. Coquillages. Avec la relation abrégée d'un voyage fait en ce pays, pendant les années 1749, 50, 51, 52 & 53*. Bauche, Paris, [vi] + 190 + xcvi + 275 pp., 19 pls., 1 map.

AFSHAR, F., 1969, Taxonomic revision of the superspecific groups of the Cretaceous and Cenozoic Tellinidae. *Geological Society of America, Memoir*, 119: 215 pp., 45 pls.

ALBAYRAK, S. & S. CAGLAR, 2006, On the presence of *Siphonaria belcheri* Hanley, 1858 (Gastropoda: Siphonariidae) and *Septifer bilocularis* (Linnaeus, 1758) (Bivalvia: Mytilidae) in the Iskenderun Bay (SE Turkey). *Aquatic Invasions*, 1(4): 292–294.

ALDERSON, E. G., 1926, The *Ampullaria swainsoni* of Philippi, Hanley, and Reeve. *Proceedings of the Malacological Society of London*, 17(1): 42–43.

BARNARD, K. H., 1964, Contributions to the knowledge of South African marine Mollusca. Part V. Lamellibranchiata. *Annals of the South African Museum*, 47(3): 361–593.

BEDDOME, C. E., 1883, Description of some new shells of Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, for 1882: 167–170.

BENSON, W. H., 1860, Descriptions of freshwater shells collected in southern India by Lieut.

Charles Annesley Benson, 45th M. N. I. *Annals and Magazine of Natural History*, (series 3), 6(34): 257–260.

BEU, A. G., 1971, Genera of the bivalve family Mesodesmatidae, with comments on some Australasian species. *Journal of the Malacological Society of Australia*, 2(2): 113–131.

BEU, A. G., 2006, Marine Mollusca of oxygen isotope stages of the last 2 million years in New Zealand. Part 2: Biostratigraphically useful and new Pliocene to Recent bivalves. *Journal of the Royal Society of New Zealand*, 36(4): 151–338.

BIELER, R., 1993, Architectonicidae of the Indo-Pacific (Mollusca, Gastropoda). *Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg*, (n.f.), 30: 377 pp.

BLANFORD, W. T., 1870, Contributions to Indian malacology, no. XI. Descriptions of new species of *Paludomus*, *Cremnoconchus*, *Cyclostoma* and of Helicidae from various parts of India. *Journal of the Asiatic Society of Bengal*, 39(2) (1): 9–25, pl. 3 [15 March].

BLANFORD, W. T., 1881, Contributions to Indian malacology, no. XII. Descriptions of new land and freshwater shells from southern and western India, Burmah, the Andaman Islands, &c. *Journal of the Asiatic Society of Bengal*, 49(4): 181–222, pls. 2, 3.

BLANFORD, W. T. & H. H. GODWIN-AUSTEN, 1908, *The fauna of British India, including Ceylon and Burma. Mollusca. Testacellidae and Zonitidae*. Taylor & Francis, London, xxxii + 311 pp.

BOSS, K. J., 1966, The subfamily Tellininae in the western Atlantic. The genus *Tellina* (part I). *Johnsonia*, 4(45): 217–272, incl. pls. 127–142.

BOUCHET, P. & J.-P. ROCROI, 2005, Classification and nomenclator of gastropod families. *Malacologia*, 47(1–2): 1–397.

BOUCHET, P. & J.-P. ROCROI, 2010, Nomenclator of bivalve families. *Malacologia*, 52(2): 1–172.

BOURGUIGNAT, J. R., 1854, Descriptions d’ancycles nouveau, de la collection de M. Cuming, précédé d’une courte notice sur le genre *Ancylus*, et d’un catalogue complet des espèces qui le composent. *Proceedings of the Zoological Society of London*, for 1853[21] (252–253): 76–93, pl. 25.

BOWDEN, J. & D. HEPPELL, 1966, Revised list of British Mollusca. I. Introduction; Nuculacea - Ostreacea. *Journal of Conchology*, 26(2): 99–124.

BRANDT, R. A. M., 1974, The non-marine aquatic Mollusca of Thailand. *Archiv für Molluskenkunde*, 105: 1–423.

BREURE, A. S. H. & J. D. ABLETT, 2011, Annotated type catalogue of the Amphibulimidae (Mollusca, Gastropoda, Orthalicoidae) in the Natural History Museum, London. *ZooKeys*, 138: 1–52.

BROT, A. L., 1860, Bemerkungen über die von Sylvanus Hanley in der “Conchological Miscellany” abgebildeten Melanien. *Malakozoologische Blätter*, 7(3): 106–115.

BROT, A. L., 1880, Die Gattung *Paludomus* auct. (*Tanalia*, *Stomatodon*, *Philopotamis*, *Paludomus*) (Melaniaceen). *Systematisches*

Conchylien-Cabinet von Martini und Chemnitz, 1(25)(2, 293): 1–52, pls. 3–8. Bauer & Raspe, Nürnberg.

BRUGUIÈRE, J. G., J. B. P. A. de M. DE LAMARCK & J. B. G. M. BORY DE SAINT-VINCENT, 1791–1827, *Tableau encyclopédique et méthodique des trois règnes de la nature. Vers, coquilles, mollusques, et polypiers*. Agasse, Paris, 3 vols., viii + 180 + 16 pp., 493 pls.

Pages	Plates	Author	Date
i–viii + 1–83 [84 blank]	1–95	Bruguière	30 July 1791
85–132	96–189, 107a–c	Bruguière	May 1792
	190–286	Bruguière	8 July 1797
	287–390	Lamarck	29 April 1798
1–16	391–488, 431bis, 431bis*	Lamarck	14 Dec. 1816
83 [repr.]–84, 133–180		Bory de Saint-Vincent	27 Sept. 1827

CALLOMON, P., 2010, Sylvanus Hanley’s *Illustrated catalogue*. *Academy Frontiers* (Philadelphia), Fall 2010: 13.

CHAMBERS, R. J. & C. D. McQUAID, 1994, Notes on the taxonomy, spawn and larval development of South African species of the intertidal limpet *Siphonaria* (Gastropoda: Pulmonata). *Journal of Molluscan Studies*, 60(3): 263–275.

CHEMNITZ, J. H., See MARTINI et al., 1769–1829.

CLENCH, W. J. & R. D. TURNER, 1951, The genus *Epitonium* in the western Atlantic. Part I. *Johnsonia*, 2(30): 249–288, incl. pls. 108–130.

COAN, E. V., 1971, The northwest American Tellinidae. *The Veliger*, 14, Supplement: 1–63, pls. 1–12.

COAN, E. V., 1973, The northwest American Donacidae. *The Veliger*, 16(2): 130–139, 1 pl.

COAN, E. V., 1983, The eastern Pacific Donacidae. *The Veliger*, 25(4): 273–297, 7 pls.

COAN, E. V., 2001, Eastern Pacific species of the venerid genus *Cyclinella* (Bivalvia). *The Veliger*, 44(4): 348–361.

COAN, E. V., 2011, Cuming’s eastern Pacific localities. *The Festivus*, 43(11): 109–112.

COAN, E. V. & A. R. KABAT, 2002, Notice and comments on a paper about S. C. T. Hanley. *The Festivus*, 34(8): 101–103.

COAN, E. V. & R. E. PETIT, 2006, Replacement names and type material: examples from Hertlein and Strong (1941–1951) and Keen (1958). *The Nautilus*, 120(3): 112–115.

COAN, E. V. & R. E. PETIT, 2011, The publications and malacological taxa of William Wood (1774–1857). *Malacologia*, 54(1–2): 1–76.

COAN, E. V. & P. H. VALENTICH-SCOTT, 2012, *Bivalve seashells of tropical west America*.

- Marine bivalve mollusks from Baja California to northern Perú*. Santa Barbara Museum of Natural History, Santa Barbara, California, Monographs 6: 1258 pp.
- COAN, E. V., P. H. VALENTICH-SCOTT & F. R. BERNARD, 2000, *Bivalve seashells of western North America. Marine bivalve mollusks from Arctic Alaska to Baja California*. Santa Barbara Museum of Natural History, Santa Barbara, California, Monographs 2: viii + 764 pp.
- CORNS, A. R. & A. SPARKE, 1915, *A bibliography of unfinished books in the English language, with annotations*. Bernard Quaritch, London, xvi + 255 pp.
- COSEL, R. VON, 1990, An introduction to the razor shells (Bivalvia: Solenacea). Pp. 283–311, in: B. MORTON, ed., *The Bivalvia – Proceedings of a memorial symposium in honour of Sir Charles Maurice Yonge, Edinburgh, 1986*. Hong Kong University, Hong Kong, viii + 355 pp.
- COSEL, R. VON, 1993, The razor shells of the eastern Atlantic. Part I: Solenidae and Pharidae I (Bivalvia: Solenacea). *Archiv für Molluskenkunde*, 122: 207–321.
- COSEL, R. VON, 2011, Pharidae. Pp. 374–375, incl. pl. 1182, in: G. T. POPPE, ed., 2011, *Philippine marine mollusks*. ConchBooks, Hackenheim, Germany, 676 pp., incl. pls. 1015–1315.
- COWAN, C. G., 1973, Proc. Zool. Soc. Lond., publication dates. *Journal of the Society for the Bibliography of Natural History*, 6(4): 293–294 [adds pagination for 1872 and 1874 vols.].
- COWIE, R. H. & S. C. THIENGO, 2003, The apple snails of the Americas (Mollusca: Gastropoda: Ampullariidae: *Asolene*, *Felipponea*, *Marisa*, *Pomacea*, *Pomella*): a nomenclatural and type catalog. *Malacologia*, 45(1): 41–100.
- DALL, W. H., 1898, Contributions to the Tertiary fauna of Florida, with especial reference to the silex beds of Tampa and the Pliocene beds of the Caloosahatchie River, including in many cases a complete revision of the generic groups treated of and their American species. Part IV. I. Prionodesmacea. II. Teleodesmacea: *Teredo* to *Ervilia*. *Wagner Free Institute of Science of Philadelphia, Transactions*, 3(4): viii + 571–947, pls. 23–35.
- DALL, W. H., 1903, Synopsis of the family Astartiidae, with a review of the American species. *Proceedings of the United States National Museum*, 26(1342): 933–951, pls. 62, 63.
- DAMON, R., 1857, *A catalogue of the shells of Great Britain & Ireland. With their synonyms and authorities*. R. Damon, Weymouth, U.K., 11 pp.
- DANCE, S. P., 1980, Hugh Cuming (1791–1865) prince of collectors. *Journal of the Society for the Bibliography of Natural History*, 9(4): 477–501.
- DANCE, S. P., 1986, *A history of shell collecting*. E.J. Brill, Leiden, xvi + 265 pp., 32 pls.
- DANCE, S. P. & W. K. EMERSON, 1967, Notes on *Morum dennisoni* (Reeve) and related species (Gastropoda: Tonnacea). *The Veliger*, 10(2): 91–98.
- DAVIES, S., 1992, The making of a municipal museum: Huddersfield and the naturalists. Pp. 681–701, in: E. A. H. HAIGH, ed., *Huddersfield: a most handsome town; aspects of the history and culture of a west Yorkshire town*. Kirklees Cultural Services, Kirklees (England), xvi + 716 pp.
- DAYRAT, B., 2009, Review of current knowledge of the systematic of the Onchidiidae (Mollusca: Gastropoda: Pulmonata) with a checklist of nominal species. *Zootaxa*, 2068: 1–26.
- DELL, R. K., 1964, Antarctic and subantarctic Mollusca: Amphineura, Scaphopoda and Bivalvia. *Discovery Reports*, 33: 93–250, pls. 2–7.
- DESHAYES, G. P., 1863, *Conchyliologie de l'île de la Réunion (Bourbon)*. Dentu, Paris, 144 pp., pls. 28–41 [= 1–14].
- DEY, A., 2006, Contribution to the knowledge of Indian marine molluscs (Part IV). Family Tellinidae. *Records of the Indian Museum, Occasional Paper*, 248: 124 pp., incl. 38 pls.
- DICKINSON, E. C., 2005, The *Proceedings of the Zoological Society of London, 1859–1900*: an exploration of breaks between calendar years of publication. *Journal of Zoology, London*, 266(4): 427–430.
- DILLWYN, L. W., 1817, *A descriptive catalogue of Recent shells, arranged according to the Linnean method; ...* Arch, London, 2 vols., 1: xii + 580 pp.; 2: 581–1092 + [29] pp.
- DRIVAS, J. & M. JAY, 1988, *Coquillages de la Réunion et de l'île Maurice*. Delachaux et Niestlé, Neuchâtel, Switzerland, 159 pp.
- DUNCAN, F. M., 1937, On the dates of publication of the Society's 'Proceedings,' 1859–1926, ... with an appendix containing the dates of publication of 'Proceedings,' 1830–1858 compiled by the late F. H. Waterhouse, and of the 'Transactions,' 1833–1869, by the late Henry Peavot, originally published in P.Z.S. 1893, 1913. *Proceedings of the Zoological Society of London*, for 1937[A](1): 71–84.
- ELDREDGE, L. G., 1987, Preliminary catalog of described species of the genus *Nerita* (Gastropoda: Neritidae). *University of Guam Marine Laboratory Technical Report*, 89: vi + 159 pp.
- FAUSTINO, L. A., 1928, Summary of Philippine marine and fresh-water mollusks. *Monographs of the Bureau of Science, Manila*, 25: 1–384.
- FISCHER-PIETTE, É., 1975, Révision des Venerinae s.s. (Mollusques Lamellibranches). *Muséum National d'Histoire Naturelle (Paris), Mémoires*, (n.s.) (Série A) Zoologie, 93: 1–64, 8 pls.
- FISCHER-PIETTE, É. & D. VUKADINOVIC, 1977, Suite des révisions des Veneridae (Moll. Lamellibr.) Chioninae, Samaranginae et complément aux Vénus. *Muséum National d'Histoire Naturelle (Paris), Mémoires*, (n.s.) (Série A) Zoologie, 106: 186 pp., 22 pls.
- FISHER, N. & J. R. LE B. TOMLIN, 1935, The dates of publication of Forbes and Hanley's Hist. Brit. Moll. *Journal of Conchology*, 20(5): 150–151.
- FORCELLI, D. O., 2000, *Moluscos Magallánicos. Guía de moluscos de Patagonia y sur de Chile*. Vazquez Mazzini, Buenos Aires, Argentina, 200 pp.
- FRETTER, V., 1943, Studies in the functional morphology and embryology of *Onchidella celtica* (Forbes and Hanley) and their bearing on its relationships. *Journal of the Marine Biological Association of the United Kingdom*, 25(4): 685–720.

FRETTER, V. & A. GRAHAM, 1976, The prosobranch mollusks of Britain and Denmark. Part 1 – Pleurotomariacea, Fissurellacea and Patelacea. *Journal of Molluscan Studies*, Supplement, 1: 1–37.

FRETTER, V. & A. GRAHAM, 1978a, The prosobranch mollusks of Britain and Denmark. Part 3 – Neritacea, Viviparacea, Valvatacea, terrestrial and freshwater Littorinacea and Rissoacea. *Journal of Molluscan Studies*, Supplement, 5: 101–152.

FRETTER, V. & A. GRAHAM, 1978b, The prosobranch mollusks of Britain and Denmark. Part 4 – Marine Rissoacea. *Journal of Molluscan Studies*, Supplement, 6: 153–241.

FRETTER, V. & A. GRAHAM, 1982, The prosobranch mollusks of Britain and Denmark. Part 7 – ‘Heterogastropoda’ (Cerithiopsacea, Triforacea, Epitoniacea, Eulimacea). *Journal of Molluscan Studies*, Supplement, 11: 363–434.

FRETTER, V. & A. GRAHAM, 1988, The prosobranch mollusks of Britain and Denmark. Part 8 – Neogastropoda. *Journal of Molluscan Studies*, Supplement, 15: 435–556.

FRETTER, V., A. GRAHAM & E. B. ANDREWS, 1986, The prosobranch mollusks of Britain and Denmark. Part 9 – Pyramidellacea. *Journal of Molluscan Studies*, Supplement, 16: 557–649.

GEIGER, D. L., 2000, *The family Haliotidae. A Conchological Iconography*. Hackenheim, Germany, 135 pp., 83 pls.

GEIGER, D. & B. OWEN, 2012, *Abalone: world-wide Haliotidae*. ConchBooks, Hackenheim, viii + 361 pp.

GLOVER, E. A., J. D. TAYLOR & S. T. WILLIAMS, 2008, Mangrove-associated lucinid bivalves of the central Indo-Pacific: review of the “*Austriella*” group with a new genus and species (Mollusca: Bivalvia: Lucinidae). *The Raffles Bulletin of Zoology*, Supplement, 18: 25–40.

GODWIN-AUSTEN, H. H., 1875, Descriptions of new species of Mollusca of the genera *Helix* and *Glessula* from the Khasi Hills and Munipur. *Journal of the Asiatic Society of Bengal*, 44 [II – Natural History](1): 1–4, pl. 1.

GODWIN-AUSTEN, H. H., 1899, 1914 [1882–1920], *Land and freshwater Mollusca of India, including South Arabia, Baluchistan, Afghanistan, Kashmir, Nepal, Burmah, Pegu, Tenasserim, Malay Peninsula, Ceylon, and other islands of the Indian Ocean. Supplementary to Messrs. Theobald and Hanley’s Conchologia Indica*. Taylor & Francis, London, 3 vols., 165 pls. (vol. 1: ix + 257 pp., 62 pls. (1882–1896); vol. 2: 18 + 442 pp., pls. 63–158 (1897–1914); vol. 3: 65 pp., pls. 159–165 (1920)).

GOULD, A. A., 1846, [Shells collected by the United States Exploring Expedition under the command of Charles Wilkes]. *Proceedings of the Boston Society of Natural History*, 2: 153–156 [one section of a long series of papers].

GRAY, J. E., 1825, A list and description of some species of shells not taken notice of by Lamarck. *Annals of Philosophy*, (n.s.), 9[25](2): 134–140.

GRAY, J. E., 1838, Catalogue of the species of the genus *Cytherea*, of Lamarck, with the description of some new genera and species. *The Analyst; a Quarterly Journal of Science, Literature, Natural History, and the Fine Arts*, 8(24): 302–309 (July).

GRÜNEBERG, H., 1976, Population studies on a polymorphic prosobranch snail (*Clithon (Pictoneritina) oualaniensis* (Lesson)). *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences*, 275(940): 385–437.

GRÜNEBERG, H., 1982, Pseudo-polymorphism in *Clithon oualaniensis*. *Proceedings of the Royal Society of London, Series B, Biological Sciences*, 216(1203): 147–157.

GUALTIERI, N., 1742, *Index testarum conchyliorum quae adservantur in Museo N. Gualtieri ... et methodice distributae exhibentur tabulis CX*. Albizzini, Florentiae, 5 parts, xxiii + 110 pls., with descriptive letterpress, 1 port.

GUDE, G. K., 1914, *The fauna of British India, including Ceylon and Burma. Mollusca. – II. (Trochomorphidae – Janellidae)*. Taylor & Francis, London, xii + 520 pp.

GUDE, G. K., 1921, *The fauna of British India, including Ceylon and Burma. Mollusca. – III. Land operculates. (Cyclophoridae, Truncatellidae, Assimineidae, Helicinidae)*. Taylor & Francis, London, xiv + 386 pp.

HAAS, F., 1910–1920, Die Unioniden. Neubearbeitung und Fortsetzung der Küsterschen und Clessinschen Monographien von *Unio* und *Anodonta*. In: H. C. KÜSTER, ed., *Systematisches Conchylien Cabinet von Martini und Chemnitz*, 9(2)(2): 1–344, pls. 1–73, 12a [work completed in the Abhandlungen, Senckenberg Inst.].

Pages	Plates	Date	Lief.
1–16	1–6	1910	545
17–40	7–12	1910	546
41–64	12a, 13–17	1911	549
65–88	18–23	1911	551
89–112	24–29	1911	554
113–136	30–35	1912	559
137–160	36–41	1913	566
161–184	42–47	1913	569
185–208	48–53	1914	571
209–256	54–59	1914	573
257–288	60–63	1919	581
289–304	64–68	1920	582
305–344	69–73	1920	584

HAAS, F., 1969a, Superfamilia Unionacea. *Das Tierreich*, 88: 663 pp.

HAAS, F., 1969b, Superfamily Unionacea. Pp. N411–N470, in: R. C. MOORE, ed., *Treatise on Invertebrate Paleontology*. Part N, Vol. 1 [of 3]. Mollusca 6: Bivalvia. Geological Society of America and the University of Kansas.

HANNAFORD ELLIS, C., 1979, Morphology of the oviparous rough winkle, *Littorina arcana* Han-

- naford Ellis, 1978, with notes on the taxonomy of the *L. saxatilis* species-complex (Prosobranchia: Littorinidae). *Journal of Conchology*, 30(1): 43–56.
- HARRY, H. W., 1985, Synopsis of the supraspecific classification of living oysters (Bivalvia: Gryphaeidae and Ostreidae). *The Veliger*, 28(2): 121–158.
- HEDLEY, C., 1913, Studies on Australian Mollusca, Part XI. *Proceedings of the Linnean Society of New South Wales*, 38(2): 258–339, pls. 16–19.
- HENISCH, H. K. & B. A. HENISCH, 1994, *The photographic experience 1839–1914; images and attitudes*. Pennsylvania State University Press, University Park, Pennsylvania, x + 462 pp.
- HIGO, S., P. CALLOMON & Y. GOTO, 2001, *Catalogue and bibliography of the marine shell-bearing Mollusca of Japan. Gastropoda. Bivalvia. Polyplacophora. Scaphopoda. Type figures*. Elle Scientific Publications, Osaka, 208 pp.
- HINDS, R. B., 1843, [descriptions of new species of shells collected during the voyage of Sir Edward Belcher, C.B., and by H. Cuming, Esq., in his late visit to the Philippine Islands ...]. *Proceedings of the Zoological Society of London*, for 1843[11](124): 55–59.
- HUBENDICK, B., 1946, Systematic monograph of the Patelliformia. *Kungliga Svenska Vetenskapsakademiens Handlingar*, (ser. 3), 23(5): 3–93 pp., 6 pls.
- HUBER, M., 2010, *Compendium of bivalves*. ConchBooks, Hackenheim, Germany, 901 pp.
- HUTTON, T., 1850, Notices of some land and fresh water shells occurring in Afghanistan. *Journal of the Asiatic Society of Bengal*, 18(2): 649–661.
- HYLLEBERG, J. & R. N. KILBURN, 2002, Annotated checklist of mollusks from the Gulf of Mannar and vicinity. *Phuket Marine Biological Center Special Publication*, 26: 19–79.
- HYLLEBERG, J. & R. N. KILBURN, 2003, Marine mollusks of Vietnam. Annotations, voucher material, and species in need of verification. *Phuket Marine Biological Center Special Publication*, 28: 1–300.
- INABA, A., K. TORIGOE & Y. OTANI, 2004, Oysters of the world. Part 2. Systematic descriptions of Recent oysters. *Bulletin of the Nishinomiya Shell Museum*, 3: 63 + 10 pp., 13 pls.
- ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE], 1966, Opinion 781. *Flabellina* Voigt, 1834 (Gastropoda): placed on the Official List of Generic Names. *Bulletin of Zoological Nomenclature*, 23(2/3): 104–105.
- ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE], 1969, Opinion 883. *Cavolinia* Abildgaard, 1791 (Gastropoda): grant under the Plenary Powers of precedence over *Cavolinia* Bruguière, 1791. *Bulletin of Zoological Nomenclature*, 26(1): 28–31.
- ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE], 1972, Opinion 986. *Helix priamus* Gmelin, 1791 (Gastropoda): placed on the official list of specific names. *Bulletin of Zoological Nomenclature*, 29(3): 119–120.
- ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE], 1999, *International Code of Zoological Nomenclature*, 4th ed. International Trust for Zoological Nomenclature, London, xxix + 306 pp.
- ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE], 2003, Declaration 44: Amendment of Article 74.7.3. *Bulletin of Zoological Nomenclature*, 60(4): 263.
- IREDALE, T., 1943, A basic list of the fresh water Mollusca of Australia. *The Australian Zoologist*, 10(2): 188–230.
- JAY, J. C., 1836, *A catalogue of Recent shells with descriptions of new or rare species in the collection of John C. Jay, M.D.*, 2nd ed. Fanshaw, New York, 80 + [4] pp., 4 pls.
- JEFFREYS, J. G., 1842, Results of deep dredging. *Annals and Magazine of Natural History*, (series 1), 10(64): 237.
- JEFFREYS, J. G., 1848, On the Recent species of *Odostomia*, a genus of gasteropodous mollusks inhabiting the seas of Great Britain and Ireland. *Annals and Magazine of Natural History*, (series 2), 2(11): 330–351.
- JEFFREYS, J. G., 1862, *British conchology, or an account of the Mollusca which now inhabit the British Isles and the surrounding seas*. Vol. I. *Land and freshwater shells*. Van Voorst, London, cxiv + 341 pp., frontispiece, 8 pls.
- JEFFREYS, J. G., 1867, *British conchology, or an account of the Mollusca which now inhabit the British Isles and the surrounding seas*. Vol. IV. *Marine shells, in continuation of the Gastropoda as far as the Bulla family*. Van Voorst, London, 487 pp., frontispiece, 8 pls.
- JEFFREYS, J. G., 1869, *British conchology, or an account of the Mollusca which now inhabit the British Isles and the surrounding seas*. Vol. V. *Marine shells and naked Mollusca to the end of the Gastropoda; with a supplement and other matter, concluding the work*. Van Voorst, London, 259 pp., frontispiece, 8 + 102 supplemental pls.
- JENKINS, B. W., 1981, *Siphonaria funiculata* Reeve (Siphonariidae, Pulmonata), a redescription making *S. virgulata* Hedley a geographical variant of *S. funiculata*. *Journal of the Malacological Society of Australia*, 5(1–2): 1–15.
- JOHNSON, R. I., 1948, Lectotypes for two species of Asiatic Unionidae in the genus *Pseudodon*. *The Nautilus*, 62(2): 48–51, pl. 2, figs. 2, 3.
- JOHNSON, R. I., 1956, Types of naiades (Mollusca: Unionidae) in the Museum of Comparative Zoology. *Bulletin of the Museum of Comparative Zoology*, 115(4): 102–142, pls. 1, 2.
- JOHNSON, R. I., 1959, The types of Corbiculidae and Sphaeriidae (Mollusca: Pelecypoda) in the Museum of Comparative Zoology and a bibliographic sketch of Temple Prime, an early specialist of the group. *Bulletin of the Museum of Comparative Zoology*, 120(4): 429–479, pls. 1–8.
- JOHNSON, R. I., 1971, The types and figured specimens of Unionacea in the British Museum (Natural History). *Bulletin of the British Museum (Natural History)*, Zoology Series, 20(3): 75–108, pls. 1, 2.

- JOHNSON, R. I., 2006, William J. Clench and Ruth D. Turner, with a personal perspective on the Department of Mollusks, Museum of Comparative Zoology. *Sporadic Papers on Mollusks*, 3: 111–166.
- KADOLSKY, D., 2012 [“2011”], Nomenclatural comments on non-marine molluscs occurring in the British Isles. *Journal of Conchology*, 41(1): 65–90.
- KAWAUCHI, G. I. & G. GIRIBET, 2011, On the ampho-Atlantic *Siphonaria pectinata* (Linnaeus, 1758) (Gastropoda: Heterobranchia: Siphonariidae): invader from the east or endemic. *Journal of Molluscan Studies*, 77(2): 196–201.
- KAY, E. A., 1979, *Hawaiian marine shells*. Bishop Museum Press, Honolulu, Hawaii, xviii + 653 pp.
- KEEN, A. M., 1960, Family Lepetidae Dall, 1860. Pp. 235–236, in: J. B. KNIGHT, L. R. COX, A. M. KEEN, A. G. SMITH, R. L. BATTEN, E. L. YOCHELSON, N. H. LUDBROOK, R. ROBERTSON, C. M. YONGE & R. C. MOORE, eds., *Treatise on Invertebrate Paleontology, Part I, Mollusca 1. Mollusca – general features, Scaphopoda, Amphineura, Monoplacophora, Gastropoda – general features, Archaeogastropoda and some (mainly Paleozoic) Caenogastropoda and Opisthobranchia*. Geological Society of America & University of Kansas, Lawrence, Kansas, xxiii + 350 pp.
- KEEN, A. M., 1971, *Sea shells of tropical west America; marine mollusks from Baja California to Peru*, 2nd ed. Stanford University, Stanford, California, xiv + 1064 pp., 22 pls.
- KILBURN, R. N., 1974, Taxonomic notes on South African marine Mollusca (4): Bivalvia, with descriptions of new species of Lucinidae. *Annals of the Natal Museum*, 22(1): 335–348.
- KILIAS, R., 1962, Gastropoda/Prosobranchia. Tonnidae. *Das Tierreich*, 77: 1–63.
- KIRBY, W. F., 1894, Contributions to the bibliography of the Thousand and One Nights and their imitations. Appendix I. Pp. 233–307, in: L. C. SMITHERS, ed., *The book of the Thousand Nights and a Night, translated from the Arabic by Captain Sir R. F. Burton*. H. S. Nichols & Co., London, vol. 8 (of 12), xii + 424 pp.
- KLEEMANN, K. H., 1983, Catalogue of Recent and fossil *Lithophaga* (Bivalvia). *Journal of Molluscan Studies*, Supplement, 12: 46 pp.
- KLEIN, J. T., 1753, *Tentamen methodi Ostracologicae, sive disposition naturalis Cochlidum et Concharum ... Lugduni Batavorum*, Wishoff, [viii] + 177 + [35] + 44 + 16 + [2] pp., 12 pls.
- KOBELT, W., 1902, Cyclophoridae. *Das Tierreich*, 16: xl + 622 pp., 1 pl.
- KÖHLER, F. & M. GLAUBRECHT, 2001, Toward a systematic revision of the southeast Asian freshwater gastropod *Brotia* H. Adams, 1866 (Cerithioidea: Pachychilidae): an account of species from around the South China Sea. *Journal of Molluscan Studies*, 67(3): 281–318.
- KÖHLER, F. & M. GLAUBRECHT, 2002, Annotated catalogue of the nominal taxa of Southeast Asian freshwater gastropods, family Pachychilidae Troschel, 1857 (Mollusca, Caenogastropoda, Cerithioidea), with an evaluation of the types. *Mitteilungen aus dem Museum für Naturkunde in Berlin, Zoologische Reihe*, 78(1): 121–156.
- KÖHLER, F. & M. GLAUBRECHT, 2006, A systematic revision of the Southeast Asian freshwater gastropod *Brotia* (Cerithioidea: Pachychilidae). *Malacologia*, 48(1–2): 159–251.
- KÜSTER, H. C. & S. CLESSIN, 1840–1890, Die Familie der Mytilidae. *Systematisches Conchylien-Cabinet von Martini und Chemnitz*, 8(3): 170 pp., 36 pls. (pp. 1–8, pls. 1, 3–5, 1840, Küster; pp. 9–12, pls. 2, 6, 1841, Küster; pp. 13–28, pls. 7–12, 1886, Clessin; pp. 29–60, pls. 13–18, pre–17 March 1887; pp. 61–76, pls. 19–21, pre–9 June 1887; pp. 77–92, pls. 22–24, 26, pre–25 Sept. 1887; pp. 93–116, pls. 27–32, pre–29 Sept. 1887, Clessin; pp. 117–124, pl. 25, pre–22 Dec. 1887, Clessin; pp. 125–132, pls. 33, 34, pre–13 July 1888, Clessin; pp. 133–156, pls. 35, 36, pre–13 Dec. 1889, Clessin; pp. 157–170, pre–17 May 1890, Clessin).
- LAM, K. & B. MORTON, 2004, The oysters of Hong Kong (Bivalvia: Ostreidae and Gryphaeidae). *Raffles Bulletin of Zoology*, 52(1): 11–28.
- LAM, K. & B. MORTON, 2009, Oysters (Bivalvia: Ostreidae and Gryphaeidae) recorded from Malaysia and Singapore. *Raffles Bulletin of Zoology*, 57(2): 481–494.
- LAMPRELL, K., 2004, The genus *Timoclea* Brown, 1827 from Australian and Indo-West Pacific waters (part 3). *Australian Shell News*, 121: 4–7.
- LAMPRELL, K. L. & J. M. HEALY, 1997, *Pitar* Römer from Australian and adjacent waters, with descriptions of four new species (Mollusca: Bivalvia: Veneridae). *Memoirs of the Queensland Museum*, 42(1): 283–306.
- LAMPRELL, K. L. & J. M. HEALY, 1998, *Bivalves of Australia*, Vol. 2. Backhuys, Leiden, 288 pp.
- LAMPRELL, K. L. & R. N. KILBURN, 1999, *Lioconcha* and *Pitar* species from the Mascarene and Andaman Islands, with a note on *Pitar bucculentus* (Römer, 1862) (Mollusca: Bivalvia: Veneridae). *Vita Marina*, 46(1–2): 42–51.
- LAMPRELL, K. L. & T. WHITEHEAD, 1992, *Bivalves of Australia*, Vol. 1. Crawford House, Bathurst, New South Wales, xiii + 182 pp.
- LAMY, É., 1929–1930, Révision des *Ostrea* vivants du Muséum National d'Histoire Naturelle de Paris. *Journal de Conchyliologie*, 73[(4)27] (1): 1–46 (30 April 1929); (2): 71–108 (20 July); (3): 133–168 (30 Oct.); (4): 233–275, 1 pl. (28 Feb. 1930).
- LAMY, É., 1933, Notes sur les espèces Lamarckiennes du genre *Perna* Bruguière, 1792. *Bulletin de Muséum National d'Histoire Naturelle* (Paris), (ser. 2), 5(5): 393–399.
- LEGRAND, W., 1872, On a new genus of freshwater mollusks. *Monthly Notices of Papers and Proceedings of the Royal Society of Tasmania*, for 1871: 27–28.
- LEMICHE, H., See ICZN, 1969,
- LISTER, M., 1687, *Historiae sive synopsis methodicae conchyliorum*, liber 3 [marine bivalves]: pls. 158–433.

- LYNGE, H., 1909, The Danish expedition to Siam 1899–1900. IV. Marine Lamellibranchiata. *Kongliga Danske Videnskabernes Selskab, Selskabs Skrifter (Naturvidenskabelig og Mathematisk Afdeling)*, (ser.7), 5(3): 97–299 [also numbered 1–203], 5 pls., 1 map.
- MARSHALL, W. B., 1887, Monograph of the family Solariidae. *Manual of Conchology*, (ser. 1), 9: 3–32, pls. 1–6.
- MARTINI, F. H. W., J. H. CHEMNITZ, J. S. SCHRÖTER, G. H. SCHUBERT & J. A. WAGNER, 1769–1829, *Neuer systematisches Conchylien-Cabinet*. G. N. Raspe, Nürnberg, 12 vols. [1: [vi] + [xviii] + 408 pp., pls. 1–31, 1769, Martini; 2: [vi] + xvi + 362 pp., pls. 32–65, 1773, Martini; 3: [vi] + vi + 434 pp., pls. 66–121, 1777, Martini; 4: [viii] + [xvi] + 344 + [1] pp., pls. 122–159, 1780, Chemnitz; 5: [viii] + [xii] + 324 pp., pls. 160–193, 1781, Chemnitz; 6: [xii] + 375 pp., pls. 1–36, 1782, Chemnitz; 7: [xii] + 356 pp., pls. 37–69, 1783, Chemnitz; 8: [vi] + [x] + 372 pp., pls. 70–102, 1785, Chemnitz; 9(1): [viii] + [iv] + 151 pp., pls. 103–116, frontispiece, 1786, Chemnitz; 9(2): [xxvi] + 194 pp., pls. 117–136, 1786, Chemnitz; 10: [viii] + [xii] + 376 pp., pls. 137–173 pp., 1788, Chemnitz; Index to vols. 1–10: [ii] + 124 pp., 1788, Schröter; 11: [iv] + [xiv] + 310 + [ii] pp., pls. 174–213, 1795, Chemnitz; 12: xii + 196 pp., pls. 214–237, 1829, Schubert & Wagner] [vols. 1–11 unavailable for nomenclatural purposes, ICZN Direction 1, 1954].
- MATSUKUMA, A., 2000, Order Veneroida. Pp. 928–1019, in: T. OKUTANI, ed., *Marine mollusks in Japan*. Tokai University Press, Tokyo, Japan, xlviii + 1,175 pp., incl. 542 pls. [does not include Kelliellidae and Vesicomysidae].
- McMILLAN, N., 1963, William Swainson's *Exotic conchology*. *Journal of the Society for the Bibliography of Natural History*, 4(3): 198–199.
- McMILLAN, N. F., 1997, The Winckworth collection of British marine Mollusca. *Conchologists' Newsletter*, 8(3): 823.
- MITRA, S. C., A. DEY & RAMAKRISHNA, 2005 [“2004”], *Pictorial handbook Indian land snails* (selected species). Zoological Survey of India, Kolkata, [iv] + 344 pp.
- MONTEROSATO, T., 1873, *Notizie intorno ai Solarii del Mediterraneo*. Ufficio Tipografico di Michele Amenta, Palermo, 11 pp.
- MORTON, B. & G. E. DINESEN, 2011, The biology and functional morphology of *Modiolarca subpicta* (Bivalvia: Mytilidae: Musculinae), epizoically symbiotic with *Ascidella aspersa* (Urochordata: Ascidiacea) from the Kattegat, northern Jutland, Denmark. *Journal of the Marine Biological Association of the United Kingdom*, 91(8): 1637–1649.
- MORTON, B. & K. S. TAN, 2003, *Brachidontes striatulus* (Bivalvia: Mytilidae) introduced into Singapore. *Malacological Review*, 35/36: 141–147.
- MYERS, B. W., C. M. HERTZ & J. GEMMELL, 1983a (May), A note on *Macoma* (*Psammacoma*) *elytrum* Keen, 1958. *The Festivus*, 15(6): 64–68.
- MYERS, B. W., C. M. HERTZ & J. GEMMELL, 1983b (August), A correction to “A note on *Macoma* (*Psammacoma*) *elytrum* Keen, 1958.” *The Festivus*, 15(8): 88.
- NAGGS, F., 1997, William Benson and the early study of land snails in British India and Ceylon. *Archives of Natural History*, 24(1): 37–88.
- NAGGS, F. & D. RAHEEM, 2000, *Land snail diversity in Sri Lanka*. (The Natural History Museum, Department of Zoology), London, xiii + 203 pp., 246 pls.
- NEAVE, S. A., M. A. EDWARDS, A. T. HOPWOOD, H. G. VEVERS, M. A. TOBIAS & P. MANLEY, 1939–1996, *Nomenclator Zoologicus*. Vol. 1: xiv + 957 pp., S. A. Neave, 1939; vol. 2: 1025 pp., S. A. Neave, 1939; vol. 3, 1065 pp., S. A. Neave, 1940; vol. 4: 758 pp., S. A. Neave, 1940; vol. 5: [viii] + 308 pp., S. A. Neave, 1950; vol. 6: [x] + 329 pp., M. A. Edwards & A. T. Hopwood, 1966; vol. 7: [iii] + 374 pp., M. A. Edwards & H. G. Ververs, 1975; vol. 8: [vi] + 620 pp., M. A. Edwards & M. A. Tobias, 1993; vol. 9: [iv] + 747, M. A. Edwards, P. Manley & A. A. Tobias, 1996.
- NEVILL, G., 1885, [“1884”], *Hand list of Mollusca in the Indian Museum, Calcutta. Part II. Gastropoda. Prosobranchia-Neurobranchia (contd.)*. Trustees of the Indian Museum, Calcutta, x + 306 pp.
- NICKLÈS, M., 1950, *Mollusques testacés marins de la côte occidentale d'Afrique*. *Manuels Ouest-Africains*, Vol. II. Paul Lechevalier, Paris, [x] + 270 pp.
- NICKLES, M., 1955, Scaphopodes et lamellibranches récoltés dans l'ouest Africain. *Atlantidae Report*, 3: 93–237.
- NICOL, D., 1952, Revision of the pelecypod genus *Echinochama*. *Journal of Paleontology*, 26(5): 803–817, pls. 118, 119.
- NISSSEN, C., 1967, *Die zoologische Buchillustration; ihre Bibliographie und Geschichte. Band I: Bibliographie; Lieferung 3*. Anton Hiersemann, Stuttgart, pp. 161–240.
- NORDSIECK, H., 2002, Annotated checklist of the South East Asian Phaedusinae, with the description of new taxa (Gastropoda, Pulmonata, Clausiliidae). *Basteria*, 66(1/3): 85–100.
- NORDSIECK, H., 2007, *Worldwide door snails (Clausiliidae), Recent and fossil*. ConchBooks, Hackenheim, 214 pp.
- NORRIS, A., 1989, *Natural history*. Pp. 47–52, in: P. BREARS, ed., *Of curiosities & rare things: the story of Leeds City Museums*. Friends of Leeds City Museums, Leeds, iv + 84 pp.
- NORRIS, A., 1995, Leeds City Museum – its natural history collections; Part 2: the invertebrates. *The Biology Curator*, 4: 19–24.
- NORRIS, A. & S. P. DANCE, 2002, Sylvanus Charles Thorp Hanley (1819–1899) a nineteenth-century dilettante of the shell world. *Journal of Conchology*, 37(4): 363–382.
- OLIVER, P. G., 1992, *Bivalved seashells of the Red Sea*. National Museum of Wales & Wiesbaden, Hemmen, Cardiff, Wales, 330 pp., incl. 46 pls.
- ORBIGNY, A. D. D., 1834–1847, *Voyage dans l'Amérique Méridionale ... exécuté pendant les années 1826 ... 1833, ...* 5(3)[Mollusques]: xliii + 758, 85 pls. [in Atlas]. Bertrand & Strasbourg, Levrault, Paris, pp. 1–48, 73–128, pls. 1, 2, 9–13, 15, 16, 56, 1834 [pls. 1, 2: 14 Nov.]; pp. 49–72, 129–176, pls. 3–8, 17–23, 25, 55, 1835 [pls. 18,

- 19, 22: 13 March; pl. 4: 18 May; pl. 3: 1 June; pp. 49–72: 23 Nov.]; pp. 177–184, pls. 14, 24, 26–28, 30–32, 34, 35, 37, 58, 1836; pls. 33, 36, 1836?; pp. 185–376, pls. 29, 38–52, 57, 1837 [pls. 38, 41: 19 June]; pls. 54, 59–66, 68, 69, 1839; pp. 377–424, pls. 53, 67, 70, 71, 1840; pp. 425–488, pls. 72–76, 80, 1841; pls. 83, 85, 1842; pl. 84, 1842?; pp. 529–600, 1845; pp. 489–528, 601–728, 1846; pp. 729–758, 1847?; pls. 77–79, 81, 82, 1847).
- OSBORNE, R. C., 1835, *The Margate guide; or, Isle of Thanet directory, etc.* [with a map]. Osborne, Margate, 65 pp. [one of several editions].
- OSBORNE, R. C., 184_?, *The shells of Margate, Ramsgate, & Broadstairs, with figures of nearly all the species.* Osborne, Sackett & Fuller, Fowler; Broadstairs, Barnes, Ramsgate, 28 pp.
- PETIT, R. E., 2003, George Perry's molluscan taxa and notes on the editions of his *Conchology* of 1811. *Zootaxa*, 377: 72 pp.
- PETIT, R. E., 2007, Lovell Augustus Reeve (1814–1865): malacological author and publisher. *Zootaxa*, 1648: 120 pp.
- PETIT, R. E., 2009, George Brettingham Sowerby, I, II & III: their conchological publications and molluscan taxa. *Zootaxa*, 2189: 218 pp.
- PETIT, R. E., 2012, John Edward Gray (1800–1875): his malacological publications and molluscan taxa. *Zootaxa*, 3214: 125 pp.
- PFEIFFER, L., 1854, Descriptions of nineteen new species of land shells, collected by M. Bourcier, Consul-General, Quito. *Proceedings of the Zoological Society of London*, for 1852[20], (247): 151–156.
- PILSBRY, H. A., 1906, Pulmonata: Achatinidae: Stenogyrinae and Coeliacinae. *Manual of Conchology*. Academy of Natural Sciences, Philadelphia, (ser. 2), 18(69): 1–64, pls. 1–20.
- PONDER, W. F., 1984, A review of the genera of the Iravadiidae (Gastropoda: Rissoacea) with an assessment of the relationships of the family. *Malacologia*, 25(1): 21–71.
- POPPE, G. T., 2011a, Veneridae. Pp. 258–311, incl. pls. 1124–1150, in: G. T. POPPE, ed., 2011, *Philippine marine mollusks*. ConchBooks, Hackenheim, Germany, 676 pp., incl. pls. 1015–1315.
- POPPE, G. T., 2011b, Semelidae. Pp. 364–365, incl. pl. 1177, in: G. T. POPPE, ed., 2011, *Philippine marine mollusks*. ConchBooks, Hackenheim, Germany, 676 pp., incl. pls. 1015–1315.
- POPPE, G. T., T. BRULET & S. P. DANCE, 1999, The family Harpidae. *A Conchological Iconography*. Hackenheim, Germany, 18 pp., 51 pls.
- POPPE, G. T. & A. LANGLEIT, 2011, Tellinidae. Pp. 314–341, incl. pls. 1152–1165, in: G. T. POPPE, ed., 2011, *Philippine marine mollusks*. ConchBooks, Hackenheim, Germany, 676 pp., incl. pls. 1015–1315.
- POWELL, A. W. B., 1979, *New Zealand Mollusca. Marine, land and freshwater shells*. Collins, Auckland, etc., xiii + 500 pp., 82 pls., map.
- PRASHAD, B., 1921, Notes on lamellibranchs in the Indian Museum. Nos. 4, 5. *Records of the Indian Museum*, 22(2): 139–149, pl. 20.
- PRASHAD, B., 1923, Revision of Kobelt's nomenclature of the Indian Ampullariidae. *Journal & Proceedings of the Asiatic Society of Bengal*, (n.s.), 18(10): 585–591.
- PRASHAD, B., 1927, On the dates of publication of Hanley and Theobald's "Conchologia Indica". *Journal of the Asiatic Society of Bengal*, (n.s.), 22(3): 129–130.
- PRASHAD, B., 1928, Revision of the Asiatic species of the genus *Corbicula*. I. – The Indian species of *Corbicula*. *Memoirs of the Indian Museum*, 9: 13–27, pls. 3, 4.
- PRASHAD, B., 1932a, The Lamellibranchia of the Siboga Expedition. Systematic part II: Pelecypoda (exclusive of the Pectinidae). In: M. WEBER, ed., *Siboga-Expeditie*, 34(53c)[= livr. 118]: 353 pp., 9 pls., 1 chart. Brill, Leiden.
- PRASHAD, B., 1932b, Notes on some little known south Asiatic Unionidae. *Proceedings of the Malacological Society of London*, 20(3): 174–178, pl. 14 (in part).
- PRASHAD, B., 1933, A revision of the Indian Nuculidae. *Archiv für Naturgeschichte*, (n.f.), 12(1): 124–135, pl. 1.
- PRESTON, H. B., 1915, *The fauna of British India, including Ceylon and Burma. Mollusca. (Freshwater Gastropoda & Pelecypoda)*. Taylor & Francis, London, xix + 244 pp.
- PRIME, T., 1869, Catalogue of the Recent species of the family Corbiculidae. *American Journal of Conchology*, 5(2) [Appendix]: 127–187.
- PRIME, T., 1895, *Catalogue of the species of Corbiculidae in the collection of Temple Prime, now forming part of the collection of the Museum of Comparative Zoology at Cambridge, Massachusetts*. Privately printed, 62 pp.
- QI, Z., ed., 2004, *Seashells of China*. China Ocean Press, Beijing, China, viii + 418 pp., 193 pls.
- RABARTS, I. W. & S. WHYBROW, 1979, A revision of the Antarctic and Subantarctic members of the genus *Yoldia* Moller, 1842 (Bivalvia: Nuculanidae). *Journal of Natural History*, 13(2): 161–183.
- RAHEEM, D. & F. NAGGS, 2006, *An illustrated guide to the land snails of Sri Lankan natural forest and cultivated habitats*. (The Natural History Museum, Department of Zoology), London, 6 pp., 6 pls.
- RAHEEM, D., F. NAGGS, N. A. ARAVIND & R. C. PREECE, 2009, *An illustrated guide to the land snails of the Western Ghats of India*. (The Natural History Museum, Department of Zoology), London, 5 pp., 5 pls.
- RAMAKRISHNA & A. DEY, 2007, *Handbook on Indian freshwater molluscs*. Zoological Survey of India, Kolkata, xxiii + 399 pp.
- RAMAKRISHNA, S. C. MITRA & A. DEY, 2010, Annotated checklist of Indian land molluscs. *Records of the Zoological Survey of India, Occasional Paper*, 306: vii + 359 pp.
- RAMORINO, M. L., 1968, Pelecypoda del fondo de la Bahía de Valparaíso. *Revista de Biología Marina*, 13(3): 176–285, 10 pls.
- REEVE, L. A., 1844, Monograph of the genus *Glaucanome*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 2: 1 pl.
- REEVE, L. A., 1846, Monograph of the genus *Siphonaria*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 9: 7 pls. (pls. 1–5, March 1846; 6, 7, May 1846).

- REEVE, L. A., 1848–1849, Monograph of the genus *Dolium*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 5: 8 pls. (pls. 1–4, Dec. 1848; 5–8, Jan. 1849).
- REEVE, L. A., 1850, Monograph of the genus *Lucina*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 6: 11 pls. (pls. 2–5, May; 6–9, June; 1, 10, 11, Aug.).
- REEVE, L. A., 1853, Monograph of the genus *Amphidesma*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 8: 7 pls. (pls. 1–4, Oct.; pls. 5–7, Nov.).
- REEVE, L. A., 1854–1855, Monograph of the genus *Donax*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 8: 9 pls. (pls. 1–6, Sept. 1854; pls. 7, 8, Oct.; pl. 9, June 1855).
- REEVE, L. A., 1857, Monograph of the genus *Modiola*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 10: 11 pls. (pls. 2–4, Aug. 1857; 5–8, Oct.; 9, Dec.; 1, 10, 11, Jan. 1858).
- REEVE, L. A., 1858–1859, Monograph of the genus *Pinna*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 11: 34 pls. (pls. 2–4, March 1858; 5–8, April; 9–16, May; 17–24, June; 25–31, Aug.; 1, 32–34, Feb. 1859).
- REEVE, L. A., 1859–1861, Monograph of the genus *Melania*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 12: 59 pls. (pls. 2–9, Nov. 1859; 10–17, Dec. 1859; 18–25, 28, Jan. 1860; 26, 27, 29, 30, Feb. 1860; 31–33, May 1860; 34–45, Sept. 1860; 46, 47, Nov. 1860; 48, 49, Dec. 1860; 50, 51, March 1861; 52, 53, April 1861; 54–59, May 1861; 1, June 1861).
- REEVE, L. A., 1862–1863, Monograph of the genus *Paludina*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 14: 11 pls. (pls. 2–4, June 1862; 5–8, Feb. 1863; 1, 9–11, April 1863).
- REEVE, L. A., 1863, Monograph of the genus *Venus*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 14: 26 pls. (pls. 2–11, April 1863; 12–23, June; 1, Feb. 1864; 24–26, March).
- REEVE, L. A. & G. B. SOWERBY II, 1865–1868, Monograph of the genus *Unio*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 16: 96 pls. (pls. 2–13, Aug. 1864; 14, Sept. 1864; 15–18, Nov. 1864; 19, 20, Jan. 1865; 21–25, April 1865; 26–30, June 1865 [pl. 30 as “1856”] – Reeve; pls. 31–38, March 1866; 39–42, May 1866; 43–46, Aug. 1866; 47–54, Nov. 1866; 55, 56, June 1867; 57–60, Sept. 1867; 61–68, Jan. 1868; 69–76, March 1868; 77–84, July 1868; 85–93, Sept. 1868; 94–96, 1, Oct. 1868 – G. B. Sowerby II).
- REID, D. G., 1996, *Systematics and evolution of Littorina*. The Ray Society, London, x + 463 pp.
- REYNELL, A., 1918a, On the dates of issue of the parts of Forbes and Hanley's *History of British Mollusca*. *Proceedings of the Malacological Society of London*, 13(1–2): 25–26.
- REYNELL, A., 1918b, The *Index Testaceologicus* of W. Wood and S. P. Hanley. *Proceedings of the Malacological Society of London*, 13(1–2): 26–27.
- REYNELL, A., 1919, Wood's *Index Testaceologicus*. – Supplementary notes. *Proceedings of the Malacological Society of London*, 13(3–4): 89.
- RIOS, E. DE C. (with the collaboration of, M. HALMOVICI, J. A. ALVARES PERES & R. AGUIAR DOS SANTOS), 1994, *Seashells of Brazil*, 2nd ed. Universidade do Rio Grande, Rio Grande, 368 pp., 113 pls.
- ROBERTS, D. & J. P. BREEN, 1985, The biology and functional anatomy of *Modiolarca tumida* (*Musculus marmoratus*) Bivalvia: Mytilidae. *Journal of Zoology, London*, (A), 205(3): 435–443.
- ROSEWATER, J., 1961, The family Pinnidae in the Indo-Pacific. *Indo-Pacific Mollusca*, 1(4): 175–226 [(53): 501–632], pls. 135–171.
- RUHOFF, F. A., 1980, Index to the species of Mollusca introduced from 1850 to 1870. *Smithsonian Contributions to Zoology*, 294: 640 pp.
- SABELLI, B., R. GIANNUZZI-SAVELLI & D. BEDULLI, 1990, *Catalogo annotato dei molluschi marini del Mediterraneo. Annotated checklist of Mediterranean marine mollusks*, vol. 1: xiv + 348 pp.
- SALISBURY, A. E., 1934, On the nomenclature of Tellinidae, with descriptions of new species and some remarks on distribution. *Proceedings of the Malacological Society of London*, 21(2): 74–91, pls. 9–14.
- SATYAMURTI, S. T., 1960, The land and fresh-water Mollusca in the collection of the Madras Government Museum. *Bulletin of the Madras Government Museum*, 6(4): 1–174, 21 pls.
- SCARLATO, O. A., 1965, [Dvustvorchatye molliuski nadsemeistva Tellinacea Kitaiskikh Morei] [Bivalved mollusks of the superfamily Tellinacea of the Chinese seas]. *Studia Marina Sinica*, 8: 27–114, 13 pls. [in Chinese with Russian summary].
- SCOTT, P. H., 1994, Bivalve mollusks from the southeastern waters of Hong Kong. Pp. 55–100, incl. 14 pls., in: B. MORTON, ed., *The malacofauna of Hong Kong and Southern China III*. Hong Kong University, Hong Kong, xxii + 504 pp.
- SEVERNS, M., 2011, *Shells of the Hawaiian Islands, Vol. 2: The sea shells; the verifiable species and their described variants*. ConchBooks, Hackenheim, 562 pp., 225 pls.
- SHEETS-PYENSON, S., 1988, How to “grow” a natural history museum: the building of colonial collections, 1850–1900. *Archives of Natural History*, 15(2): 121–147.
- SHERBORN, C. D., 1922–1933, *Index Animalium sive index nominum quae ab A.D. MDCCCLVIII generibus et specibus animalium imposita sunt. Section Secunda. A kalendis Ianuariis, MDCCCL usque ad finem Decembris, MDCCCL*. British Museum (Natural History), London. [Issued in 33 parts: 1, [i]–cxxxii, 1–128, 1922; 2, 129–384, cxxxiii–cxxxvi, 1923; 3, 385–640, 1923; 4, 641–943, 1924; 5, 945–1196, 1924; 6, 1197–1452, 1925; 7, 1453–1771, [cxxxvii]–cxxxix, 1925;

- 8, 1773–2008, 1925; 9, 2009–2248, 1926; 10, 2249–2568, 1926; 11, 2569–2880, 1926; 12, 2881–3136, 1927; 13, 3137–3392, 1927; 14, 3393–3746, 1927; 15, 3747–3970, 1928; 16, 3971–4194, 1928; 17, 4195–4450, 1928; 18, 4451–4690, 1929; 19, 4691–4930, 1929; 20, 4931–5138, 1929; 21, 5139–5348, 1929; 22, 5349–5701, 1930; 23, 5703–5910, 1930; 24, 5911–6118, 1930; 25, 6119–6358, 1931; 26, 6359–6582, 1931; 27, 6583–6806, 1931; 28, 6807–7056, 1932; 29, [i]–vii, cxxxiii–cxlvi, 1–208, 1932; 30, 209–416, 1932; 31, 417–654, 1932; 32, 655–878, 1933; 33, 879–1098, 1933].
- SHERBORN, C. D., 1940, *Where is the – [damned] collection? An account of the various natural history collections which have come under the notice of the compiler*. Cambridge University Press, Cambridge, 148 pp.
- SHERBORN, C. D. & A. REYNELL, 1915, Notes on Swainson's "Exotic conchology". *Proceedings of the Malacological Society of London*, 11(5): 276–282.
- SIMONE, L. R. L. de, 2006, *Land and freshwater molluscs of Brazil*. Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil, 290 pp. + two sheets of errata.
- SIMONE, L. R. L. & S. WILKINSON, 2008, Comparative morphological study of some Tellinidae from Thailand (Bivalvia: Tellinidae). *Raffles Bulletin of Zoology*, Supplement, 18: 151–190.
- SIMPSON, C. T., 1900, Synopsis of the naiads, or pearly fresh-water mussels. *Proceedings of the United States National Museum*, 22: 501–1044, pl. 18.
- SIMPSON, C. T., 1914, *A descriptive catalogue of the naiades or pearly freshwater mussels*. Bryant Walker, Detroit, Michigan, 3 pt., 11 + 1,540 pp.
- SMITH, B. J., 1992, *Zoological Catalogue of Australia, volume 8, Non-Marine Mollusca*. Australian Government Publishing Service, Canberra, xii + 405 pp.
- SMITH, E. A., 1881, Observations on the genus *Astarte*, with a list of the known Recent species. *Journal of Conchology*, 3(3): 196–224; (4): 225–232.
- SMITH, E. A., 1885, *Report on the Lamellibranchiata collected by H.M.S. Challenger, during the years 1873–76. Report on the Scientific Results of the Voyage of H.M.S. Challenger during the years 1873–76 ... Zoology*, 13(35): 341 pp., 25 pls.
- SMITH, E. A., 1895, Observations on the genus *Clea*, with the description of a new species. *Proceedings of the Malacological Society of London*, 1(6): 251–253.
- SMITH, E. A., 1906, Mollusca. Pp. 701–730, in: E. R. LANKESTER, ed., *History of the Collections Contained in the Natural History Departments of the British Museum. Vol. II: Separate Historical Accounts of the Several Collections Included in the Department of Zoology*.
- SMITH, E. A., 1909, Note on "Photographic conchology". *Proceedings of the Malacological Society of London*, 8(4): 196–197.
- SMITH, E. A., 1915, Note on *Tellina splendida* of Anton. *Journal of Conchology*, 14(11): 339–340.
- SMITH, S. M. & D. HEPPELL, 1991, Checklist of British marine Mollusca. *National Museums of Scotland Information Series*, 11: 114 pp.
- SOOT-RYEN, T., 1955, A report on the family Mytilidae (Pelecypoda). *Allan Hancock Pacific Expeditions*, 20(1): [iv] + 261 pp., pls. 1–10.
- SOULEYET, L. F. A., 1852, *Zoologie: mollusques & zoophytes*. In: J. F. R. EYDOUX & L. F. A. SOULEYET, *Voyage autour du monde execute pendant les années 1836 et 1837 sur la corvette La Bonite comandée par M. Vaillant*, Vol. 2. Bertrand, Paris, 664 pp., Atlas: Mollusques pls. 1–45, 15bis, 23bis, 24bis, 24A–E, Zoophytes pls. 1, 2, Vers, pl. 1.
- SOWERBY, G. B., I, 1833, Genus *Nucula*. *Conchological illustrations*, (14): figs. 1–3 (11 Jan.); (15): 4–17 (18 Jan.); (16): 18–24, [5] pp. catalogue (Jan. or Feb.). Sowerby, London.
- SOWERBY, G. B., II, 1852, Monograph of the genus *Tapes*. In: G. B. SOWERBY II, ed., *Thesaurus conchyliorum; or, monographs of genera of shells*, 2(13): 678–699, pls. 145–151. Sowerby, London.
- SOWERBY, G. B., II, 1866–1869, Monograph of the genus *Tellina*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 17: 58 pls. (pls. 2–9, July 1866; 10, Aug.; 11–18, Nov.; 19–26, March 1867; 27–34, June; 35–42, Sept.; 43–44, March 1868; 45, Sept.; 46–54, Oct.; 1, 55–58, April 1869).
- SOWERBY, G. B., II, 1870–1871, Monograph of the genus *Ostraea*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 18: 33 pls. (pls. 2–5, Oct. 1870; 6–13, Jan. 1871; 14–16, Feb.; 17–27, Sept.; 1, 28–33, Nov.).
- SOWERBY, G. B., II, 1874, Monograph of the genus *Solen*. *Conchologia iconica; or, illustrations of the shells of molluscos animals*, 19: 7 pls. (pls. 2–4, April; 5, 6, June; 1, 7, Aug.).
- STARMÜHLNER, F., 1974, Results of the Austrian-Ceylonese Hydrobiological Mission 1970 of the 1st Zoological Institute University of Vienna (Austria) and the Department of Zoology of the University of Ceylon, Vidyalankara Campus, Kalaniya (Sri Lanka), Part XVII: the freshwater gastropods of Ceylon. *Bulletin of the Fisheries Research Station, Sri Lanka*, 25(1–2): 97–81, pls. 2–16.
- STARMÜHLNER, F., 1977, The genus *Paludomus* in Ceylon. *Malacologia*, 16(1): 261–264.
- STENZEL, H. B., 1971, Oysters. Pp. iv + 953–1224, in: L. R. COX et al., Part N [Bivalvia], *Mollusca* 6, vol. 3. In: R. C. MOORE, ed., *Treatise on invertebrate paleontology*. Geological Society of America & University of Kansas, Lawrence, Kansas.
- STEVENSON, S. E., 1973, Arcacea (Mollusca: Bivalvia) types in the British Museum (Natural History). *Bulletin of the British Museum (Natural History) (Zoology)*, 24(3): 195–204.
- SUBBARAO, N. V., 1989, *Handbook of freshwater molluscs of India*. Zoological Survey of India, Kolkata, 289 pp.
- SUBBARAO, N. V. & S. C. MITRA, 1991, Land molluscs of Andaman and Nicobar Islands. *Records of the Zoological Survey of India, Occasional Paper*, 126: 88 pp., 8 pls.

- SWAINSON, W., 1821–1822, *Exotic conchology*. W. Wood & J. & A. Arch, London, 4 parts, iv + [12] pp., [32 pls.] [concerning: Sherborn & Reynell, 1915; McMillan, 1963].
- SWANN, C. K., 1956, Natural history books from a bookseller's point of view. *Journal of the Society for the Bibliography of Natural History*, 3(3): 117–126.
- TAYLOR, J. D., S. T. WILLIAMS, E. A. GLOVER & P. DYAL, 2007, A molecular phylogeny of heterodont bivalves (Bivalvia: Heterodonta): new analysis of 18S rRNA and 28S rRNA genes. *Zoologica Scripta*, 36(6): 587–606.
- TEBBLE, N., 1976, *British bivalve seashells. A handbook for identification*, 2nd ed. British Museum (Natural History), London, 212 pp., 12 pls.
- THEOBALD, W., 1876, *Catalogue of the land and fresh-water shells of British India*. Thacker, Spink & Co., Calcutta, i–ii, 1–50, 51a–54a, 51–65.
- THOMPSON, F. G., 2011, An annotated checklist and bibliography of the land and freshwater snails of México and Central America. *Bulletin of the Florida Museum of Natural History*, 50(1): 1–299.
- THOMPSON, W., 1847, Additions to the fauna of Ireland. *Annals and Magazine of Natural History*, (1) 20(132): 169–176.
- TOMLIN, J. R. LE B., 1923, Some synonyms in the Veneridae. *Proceedings of the Malacological Society of London*, 15(6): 310–313.
- TOMLIN, J. R. LE B., 1944, Editorial notes [obituary]. *Journal of Conchology*, 22(4): 95.
- TOMLIN, J. R. LE B., 1945, Book notes. *Proceedings of the Malacological Society of London*, 26(4/5): 89–91.
- TREW, A., 1992, *Henry and Arthur Adams's new molluscan names*. National Museum of Wales, Cardiff, 63 pp.
- TRYON, G. W., 1862, On the classification and synonymy of the Recent species of Pholadidae. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 14: 191–221.
- TRYON, G. W., 1886, [Monograph of] Naticidae. *Manual of conchology*. Tryon, Philadelphia, (ser. 1), 8(29): 1–64, pls. 1–27; (30): 65–100; pls. 28, 29.
- TRYON, G. W., 1887, [Monograph of] Sculariidae. *Manual of conchology*. Tryon, Philadelphia, (ser. 1), 9(34): 49–111, pls. 11–18.
- TRYON, G. W., 1888, [Monograph of] Neritidae. *Manual of Conchology*. Conchological Section of the Academy of Natural Sciences, Philadelphia, (ser. 1), 10: 3–82, pls. 1–29. [note: first half of this volume by Tryon; remaining by Pilsbry].
- TUCKER, J. K., 2003, Catalogue of Recent and fossil turrids (Mollusca: Gastropoda). *Zootaxa*, 682: 1,295 pp.
- TUNNELL, J. W., JR., J. ANDREWS, N. C. BARRERA & F. MORETZSOHN, 2010, *Encyclopedia of Texas seashells. Identification, ecology, distribution, and history*. College Station, Texas A & M University, Texas, xi + 512 pp.
- TURNER, R. D., 1966, *A survey and illustrated catalogue of the Teredinidae*. Harvard University, Museum of Comparative Zoology, ix + 265 pp., 64 pls.
- TURNER, R. D. & J. ROSEWATER, 1958, *The family Pinnidae in the western Atlantic*. *Johnsonia*, 3(38): 285–326, incl. pls. 149–171.
- VERMEIJ, G. J., 1998, Generic revision of the neogastropod family Pseudolividae. *The Nautilus*, 111(2): 53–84.
- VOS, C., 2007, The family Tonnidae. *A conchological iconography*. Hackenheim, Germany, 121 pp., 63 pls.
- WANG, Z., 2004a, Mytiloidea. Pp. 224–235, pls. 118–125, in: Z. Qi, ed., *Seashells of China*. China Ocean Press, Beijing, China, viii + 418 pp., 193 pls.
- WANG, Z., 2004b, Tellinoidea. Pp. 277–296, pls. 152–161, in: Z. Qi, ed., *Seashells of China*. China Ocean Press, Beijing, China, viii + 418 pp., 193 pls.
- WARÉN, A., 1980, Marine Mollusca described by John Gwyn Jeffreys, with the location of type material. *Conchological Society of Great Britain and Ireland, Special Publication*, 60 pp., 8 pls.
- WARÉN, A., 1988, The identity of *Turbo politus* Linnaeus, 1758 (Prosobranchia: Eulimidae). *Bollettino Malacologico*, 24(1–4): 17–24.
- WARÉN, A., 1996, New and little known Mollusca from Iceland and Scandinavia. Part 3. *Sarsia*, 81(3): 197–245.
- WARÉN, A., 2011, A new species of *Lothia* (Gastropoda: Lepetidae) from Chilean methane seeps, with comments on the accompanying gastropod fauna. *The Nautilus*, 125(1): 1–14.
- WEISBORD, N. E., 1964, Late Cenozoic pelecypods from northern Venezuela. *Bulletins of American Paleontology*, 45(204): 564 pp., 59 pls.
- WELTERS-SCHULTES, F. W., 2011, Authorships of taxonomic names in malacology. *Mitteilungen der Deutschen Malakozoologischen Gesellschaft*, 85: 35–48.
- WESLEY, W., 1890, *The natural history and scientific book circular (No. 105); important works for sale on Invertebrata: Part II. Conchology. Recent and fossil Mollusca*. William Wesley & Son, London, 34 pp. [inserted in the *Journal of Conchology*, vol. 6(8) (1890)].
- WHELAN, N. V., A. J. GENEVA & D. L. GRAF, 2011, Molecular phylogenetic analysis of tropical freshwater mussels (Mollusca: Bivalvia: Unionidae) resolves the position of *Coelatura* and supports a monophyletic Unionidae. *Molecular Phylogenetics and Evolution*, 61: 504–514.
- WILKINS, G. L., 1953a, Notes from the British Museum, I. *Pinna*. Appendix: List of type specimens of *Pinna* in the collection of the British Museum. *Proceedings of the Malacological Society of London*, 30(1–2): 23–29, pl. 6.
- WILKINS, G. L., 1953b, A catalogue and historical account of the Sloane shell collection. *Bulletin of the British Museum (Natural History) (Historical Series)*, 1(1): 1–47, 12 pls.
- WILKINS, G. L., 1955, A catalogue and historical account of the Banks shell collection. *Bulletin of the British Museum (Natural History) (Historical Series)*, 1(3): 69–119, pls. 14–19.
- WILKINS, G. L., 1957, The Cracherode shell collection. *Bulletin of the British Museum (Natural History) (Historical Series)*, 1(4): 124–184, pls. 20–25.

- WILLAN, R. C., 1993, Taxonomic revision of the family Psammobiidae (Bivalvia: Tellinoidea) in the Australian and New Zealand region. *Records of the Australian Museum*, Supplement, 18: 132 pp.
- WILLIAMSON, M., 1992, Haldane's special preference. *The Linnean: Newsletter and Proceedings of the Linnean Society of London*, 8(3): 12–15.
- WINCKWORTH, R., 1929, Marine Mollusca from south India and Ceylon. III. *Pinna*. With an index to the Recent species of *Pinna*. *Proceedings of the Malacological Society of London*, 18(6): 276–297.
- WINCKWORTH, R., 1931, On *Nucula nitida*, Sowerby. *Proceedings of the Malacological Society of London*, 19(6): 280–281.
- WINCKWORTH, R., 1932, The British marine Mollusca. *Journal of Conchology*, 19(7): 211–252.
- WINCKWORTH, R. & J. R. LE B. TOMLIN, 1933, Recent species of the genus *Tonna* (= *Dolium*). *Proceedings of the Malacological Society of London*, 20(4): 206–213.
- WOOD, W., 1818, *Index testaceologicus; or, a catalogue of shells, British and foreign, arranged according to the Linnean system; with the Latin and English names, references to figures, and places where found*. Taylor, London, viii + 188 + [2] pp., 8 pls. [concerning this and the following three works: Coan & Petit, 2011].
- WOOD, W., 1823–1825, *Index testaceologicus; or, a catalogue of shells, British and foreign, arranged according to the Linnean system; with the Latin and English names, references to authors, and places where found* [2nd ed.]. Wood, London, xxxii + [2] + 188 + [2] pp., 38 pls. [1: vii–viii + 1–64 pp., 13 pls., June 1823; 2: title page + ix–xxxii + 65–188, pls. 14–38, 1825].
- WOOD, W., 1828a, *Index testaceologicus; or, a catalogue of shells, British and foreign, arranged according to the Linnean system; with the Latin and English names, references to figures, and places where found*, 2nd ed. Wood, London, xxii + [1] + 212 pp., 38 pls.
- WOOD, W., 1828b, *Supplement to the Index testaceologicus; or a catalogue of shells, British and foreign*. Wood, London, vi + 59 pp., 8 pls. [pre–1 July 1828].
- WOODWARD, B. B., 1901, Dates of publication of Forbes & Hanley's "History of British Mollusca." *Journal of Conchology*, 10(2): 47; *Journal of Malacology*, 8(1): 21.
- XU, F., 2004, *Nuculoida*. Pp. 209–212, pls. 111–112, in: Z. Qi, ed., *Seashells of China*. China Ocean Press, Beijing, China, viii + 418 pp., 193 pls.
- XU, F., S. ZHANG & S. WANG, 2008, *An illustrated Bivalvia Mollusca fauna of China seas*. Science Press-Scientific Publishing Center, Beijing, viii + 336 pp., incl. 136 unnumbered pls.
- ZHANG, J.-L., F.-S. XU & R.-Y. LIU, 2012, The Myidae (Mollusca, Bivalvia) from Chinese waters with description of a new species. *Zootaxa*, 2283: 39–60.

INDEX TO HANLEY AND "HANLEY" TAXA

To facilitate locating Hanley (and Thorpe) taxa, the following Index contains taxa made available by Hanley (or Thorpe) in **bold** face and taxa incorrectly attributed to Hanley in regular italics type. This index does not cover senior or junior synonyms or homonyms of Hanley's taxa.

- abyssicola*, *Rissoa* 329
- acinaces*, *Solen*** 322
- acuminatus*, *Solen*** 323
- acuminatus*, *Tellinides*** 308
- ala*, *Tellina*** 308
- ampullarioides*, *Paludina* 327
- ancilla*, *Pseudoliva*** 332
- ancilla*, *Tellina*** 296, 308
- andamanicus*, *Bulimus*** 339
- anguis*, *Cyclophorus stenostoma*** 326
- angusta*, *Dolium variegatum*** 330
- angustior*, *Unio generosus*** 304
- anserina*, *Helix* 339
- antipodum*, *Nucula*** 298
- arakanensis*, *Helix tapeina*** 339
- arcuatula*, *Modiola*** 299
- ascia*, *Unio*** 304
- asper*, *Donax*** 317
- aspera*, *Melania variabilis*** 327
- asperrima*, *Tellina*** 308
- assamensis*, *Pterocyclos parvus*** 326
- assimilis*, *Donax*** 317
- assimilis*, *Pinna* 302
- assimilis*, *Tellina*** 308
- aurea*, *Unio indicus*** 304
- aurora*, *Tellina*** 308
- australis*, "Sicaretus"** 329
- australis*, *Solarium (Philippia) hybridum*** 333
- Bacillum* 338
- bacillum*, *Clausilia*** 337
- bairdii*, *Solarium*** 333
- beanii*, *Cingula*** 329
- beddomeae*, *Helix (Plectopylis)*** 338
- belcheri*, *Siphonaria*** 336
- bensonianus*, *Mycetopus*** 306
- bhamaoensis*, *Unio* 306
- bicolor*, *Ostrea*** 303
- bidens*, *Solen*** 319
- biradiata*, *Modiola*** 299
- birmanus*, *Unio* 306
- blainvillei*, *Siphonaria*** 336
- bonanni*, *Chama arcinella*** 306
- bottampotana*, *Achatina*** 337
- brasiliensis*, *Modiola* 301
- brevior*, *Solenella norrisii*** 299
- brevis*, *Solen*** 322
- britannica*, *lanthina*** 331

- brookei*, *Leda* 298
bruguieri, *Tellina* 308
bruguieri, *Venus* 320
brunnea, *Siphonaria* 336
calathus, *Rissoa* 329
callichroa, *Ostrea* 303
canaliferum, *Solarium* 333
canaliferus, *Modiola* (*Lithodomus*) 300
Cancellariidae 297, 332
candaharicus, *Unio marginalis* 306
carbo, *Siphonaria* 336
carinata, *Donax* 317
carnicolor, *Amphidesma* 318
carnicolor, *Tellina* 308, 311
carolinensis, *Pinna* 302
carpenteri, *Bulla* (*Cylichna*) 335
cashmirensis, *Corbicula* 307
casta, *Tellina* 309
Cavolina 297, 335
celticum, *Onchidium* 337
cerasum, *Ampullaria* 325
Cerithiopsis 297, 331
chemnitzii, *Ostrea* 303
chemnitzii, *Pinna* 302
chemnitzii, *Venus* 320
chinensis, *Tellina* 309
cincta, *Melania variabilis* 327
clarkii, *Cerithiopsis* 331
clausus, *Pholas* 324
cochinensis, *Cyrena* 307
Cochlycopa 286, 297, 332
collina, *Succinea* 337
coluber, *Nerita* 325
columbiensis, *Ostrea* 303
columbiensis, *Tellina* 309
concolor, *Helix zoroaster* 339
confusa, *Leda* 298, 299
conica, *Cyclophorus tryblum* 326
conradi, *Leda* 298
conspicua, *Tellina* 309
coquimbensis, *Montacuta* 306
cor, *Cytherea* 293, 320
corbis, *Unio* 304
corbuloides, *Tellina* 309
coromandelianus, *Planorbis* 337
costata, *Psammobia* 318
culter, *Donax* 317
culter, *Tellina* 309
cumingii, *Cyrenoidea* 319
cumingii, *Dolium* 331
cumingii, *Paludina* 327
cumingii, *Pandora* 324
cumingii, *Pinna* 303
cumingii, *Solarium* 333
cumingii, *Solenella* 299
cumingii, *Tellina* 309
cuneiformis, *Modiola* 300, 301
curta, *Glaucanome* 308
cusps, *Tellina* 309
cycladiformis, *Tellina* 309
cygnus, *Tellina* 309
cylindraceus, *Solen* 322
cylindrica, *Unio marginalis* 304
Cyrenoidea 306
cyrenoidea, *Tellina* 309
decipiens, *Venus* 320
dentifera, *Donax* 317
deshayesii, *Arca* 301
deshayesii, *Tellina* 310
deshayesii, *Venus* 320
diana, *Tellina* 310
diemenensis, *Cytherea* 320
discus, *Tellina* 310
dohrni, *Leda* 298
dombei, *Tellina* 310
dorbignyi, *Pinna* 303
dunkeri, *Dolium* 330
dunkeri, *Solarium* 333
dysoni, *Ampullaria* 325
eburnea, *Tellina* 310
ecarinata, *Paludina ceylanica* 326
effossa, *Cytherea* 320
elongata, "*Osteodoma*" 324
elongata, *Modiola* 300, 301
elongata, *Tellina* 310
Elysiidae 297, 335
euglypta, *Pinna* 303
eulimoides, *Odostomia* 334
evezardi, *Pupa* 337
excavata, *Cytherea* 320
exulum, *Siphonaria* 336
fabricii, *Tellina* 310
fairbanki, *Cremnoconchus* 328
fasciata, *Ampullaria globosa* 325
favannii, *Dolium* 330
felix, *Tellina* 310
filosa, *Paludina* 327
fimbriata, *Melania* 327
fimbriata, *Tellina* 310
Flabellina 335
flavidus, *Donax* 317
formosa, *Tellina* 310
fragilis, *Scalaria* 331
fragilis, *Unio corrugates* 304
frigida, *Tellina* 310
fulgurans, *Cyclophorus arthric[us]* 326
fumata, *Pinna* 303
fusiformis, *Melania baccata* 327
Galeomna 306
gelida, *Tellina* 311
gibbosa, *Leda elenensis* 298
globularis, "*Cingula?*" 329

- globularis, Jeffreysia* 335
"Goliah", Melania 327
gouldii, Pinna 303
gouldii, Tellina 311
gracilior, Lacuna 328
gracilis, Donax 317
gracilis, Eulima distorta 331
grandis, Tellina 311
granulatus, Mytilus 300
gravida, Leptomya 318
gubernaculum, Tellina 311
guildingii, Tellina 311
guinensis, Solen 322
Herculea 332
hiberna, Tellina 296, 311
hilaris, Tellina 311
hindsii, Cytherea 320
hindsii, Leda 298
hystrix, Pinna 302
illustris, Achatina (Electra) 338
imbellis, Tellina 311
imbricata, Melania reevei 327
impar, Donax 317
inaequalis, Tellina 311
incarnata, Tellina 311
indica, Tapes 322
ingrami, Helix 338
inornata, Tellina 311
inornatus, Unio 306
insculpta, Tellina 311
intermedia, Paludina 327
involutus, Unio 304, 305
iravadica, Corbicula 307
iridescens, Ostrea 303
irus, Tellina 312
isis, Achatina (Glessula) 338
japonica, Pinna 303
jeffreysii, Spirialis 335
jeffreysii, Turbonilla 335
jubar, Tellina 312
jugicostis, Melania 328
junior, Solarium (Torinia) stramineum 333
juvenilis, Tellina 312
kingii, Natica 293, 330
kraussii, Pinna 302
lacerata, Ostrea 303
lacerata, Venus 320
laceridens, Tellina 312
lamarckii, Venus 322
lanceolata, Melania reevei 328
latesulcatum, Dolium 330
latisulca, Crassina 306
Legrandia 337
lilium, Tellina 312
limborgi, Melania 327
lisor, Mactra 319
listeri, Donax 317
listeri, Paludina 326
listeri, Perna 302
listeri, Tellina 312
littorea, Rissoa 330
Lomonotus 335
lubricus, Donax 317
lucerna, Tellina 312
lucinoides, Tellina 312
Lucinopsis 297, 321
lux, Tellina 312
lyra, Tellina 312
lyra, Venus 321
lyrata, Achatina (Electra) 338
macandrewi, Spirialis 335
mactroides, Pythina 307
maddocki, Legrandia 337
magnifica, Venus 321
malabarica, Nucula 298
mandelayanus, Unio 306
mandraei, Nucula 298
margarita, Alycaeus 326
mars, Tellina 312
mastersi, Pterocyclos (Spiraculum) 326
mauritii, Nucula 298
mazatlanica, Meleagrina 302
media, Leda elenensis 298
megodon, Ostrea 303
megotara, Teredo 324
melanostoma, Paludomus 328
menkei, Pinna 303
merguiensis, Planorbis 337
mesodesmoides, Donax 317
metcalfei, Leda 299
metcalfei, Modiola 300
metcalfei, Pleurotoma 332
micans, Leda 299
micans, Tellina 313
miles, Tellina 313
minax, Pinna 302
modesta, "Bythinia" 330
monile, Paludomus 328
multicostatum, Amphidesma 318
multistriata, Ostrea 303
nassoides, Pseudoliva 331
navicula, Donax 318
nietneri, Helix 339
nigra, Modiola 301
nitidissima, Skeneia 334
nivea, Cytherea 321
niveus, Solen 322
nobilis, Tellina 313
nuculoides, Pythina 307
nuttallii, Siphonaria 336
nux, Tellina 313

- obesa, Unio marginalis* 304
obliquata, Cytherea 321
oblonga, Cyrenoidea 320
obtusa, Periploma 324
ophis, Cyclophorus 326
Osteodoma 324
ovum, Cytherea 321
owenii, Donax 318
owenii, Tellina 313
parma, Siphonaria 336
partioti, Cyclostoma 328
patagonica, Modiola 301
patula, Littorina 291, 328
peguensis, Melania reevei 327
pellucida, Cingula 330
perplexa, Tellina 313
pestigris, Ostrea 303
pharaonis, Tellina 313
phidias, Helix 339
philippinarum, Cyrena 307
philippinarum, Cytherea 321
philippinarum, Lucina 306
philippinarum, Modiola 300
philippinarum, Solen 323
philippinarum, Tellina 313
philippiensis, Pinna 303
picta, Cyclophorus affinis 326
picta, Dolium latesulcatum 330
Pilidium 297, 325
pinguis, Tellina 313
pisum, Corbicula 307
placens, Cyrena 307
planulata, Solarium (Torinia) perspectivi-unculus 333
planum, Mesodesma 319
plebeia, Cytherea 321
plebeia, Tellina 313
plectrum, Tellina 313
plumula, Modiola (Lithodomus) 300
ponderosa, Oniscia 332
princeps, Tellina 314
producta, Leda confusa 299
Propilidium 297, 325
prora, Tellina 314
proxima, Rissoa 330
psittacus, Leptomya 318
pudica, Tellina 314
puella, Tellina 314
pulchella, Donax 318
pumila, Tellina 314
punctatostriata, Donax 318
"purpurea?", Ostrea edulis 304
pygmaea, Corbula 323
pyriformis, Leda elenensis 299
quadrata, Corbula 323
quoyi, Cytherea 321
radiata, Cyrena 307
radiata, Nucula 298
radula, Unio 305
rastellum, Tellina 314
redimiculum, Siphonaria 336
reevei, Helix juliana 339
reevei, Solarium 333
reevii, Dolium 330
regia, Pinna 303
regia, Tellina 314
regium, Solarium 333
rhodon, Tellina 314
rhomboidea, Modiola 301
rissoides, Odostomia 334
roborata, Venus 321
robusta, Tellina 314
rodon, Tellina 314
rosea, Emarginula 325
rostellum, Pinna 302
rota, Skeneia 334
rubescens, Tellina 314
rugosa, Glauconome 307, 308
rumphii, Pinna 303, 336
rumphii, Siphonaria 336
sanguinea, Haliotis 324
sattaraensis, Achatina (Electra) 338
scabra, Venus 321
scabrum, Amphidesma 319
scalariformis, Rissoa 329
scalpellum, Tellina 315
schomburgki, Melania 328
scobina, Unio 305
sculpta, Artemis 322
semen, Tellina 315
semistriata, Mya 323
semisulcata, Donax 318
senator, Achatina (Glessula) 338
senegalensis, Tellina 315
serratizona, Cyclophorus 326
simplex, Artemis 322
sincera, Tellina 315
sloanii, Solen 323
sol, Tellina 315
solida, Helix semidecussata 339
solida, Unio corrugatus 305
sordida, Cyrena 307
sordida, Modiola 300
sordidus, Donax 318
souleyeti, Tellina 315
soverbii, Solarium 333
sowerbii, Melania herculea 327
sowerbii, Tellina 315
sowerbyi, Cyclostoma 328
spectabilis, Leptomya 319
spectabilis, Tellina 315
sphaerica, Ampullaria globosa 325

- spinosa, Melania* 327, 328
spinosa, Tellina 316
strangei, Pinna 303
striatula, Modiola 300
strigata, Limnaea ovalis 336
strigata, Modiola 300
strigata, Solarium (Torinia) infundibuliforme 333
strigatus, Mytilus 301
striolata, Odostomia 334
subnodulosa, Venus 322
subquadrata, Artemis 322
subramosa, Modiola 301
subrosea, Tellina 316
subtruncata, Tellina 316
swainsoni, Ampullaria 325
sylhetica, Limnaea ovalis 336
tankervillii, Dolium variegatum 330
taylori, Leda 299
taylori, Solarium 333
tellinoides, Kellia 307
tenebrosa, Dolium galea 331
tennentii, Cyrena 307
tennentii, Parmacella 338
tennentii, Unio 305
terebratuliformis, Ostrea cucullata 304
theobaldi, Achatina (Electra) 338
theobaldi, Ampullaria 325
theobaldi, Novaculina gangetica 323
thersites, Paludina 327
thuelcha, Solen 323
ticaonicus, Donax 318
triquetrum, Mesodesma 319
trirostris, Unio 290, 305
tuba, Clausilia 337
tulipa, Tellina 316
tumida, Modiola 301
turrita, Odostomia 334
turrita, Parthenia 334
typica, Unio marginalis 305
umbilicatus, Nautilus 339
undata, Solarium (Philippia) hybridum 333
undulata, Tellina 316
utriculus, Teredo 324
valtonis, Tellina 316
valvatoides, Cyclostoma 329
varians, Cytherea 322
variegata, Tapes 322
velaris, Unio 305
vermetiformis, Solarium (Torinia) cylindraceum 333
vernalis, Tellina 316
verrucosa, Tellina 316
vestalis, Tellina 316
vidua, Helix 339
virens, Glauconome 308
virgo, Tellina 316
virgulata, Tellina 316
viridis, Paludina 327
vulcanus, Unio 305
vulsella, Tellina 317
walpolei, Monocondylaea 305
woodwardi, Leda (Yoldia) 299
zebuense, Amphidesma 319
zonata, Paludina 327
zonata, Unio marginalis 306